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WEDNESDAY APRIL 7 1999

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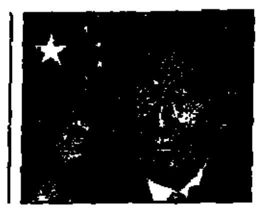

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Nato dismisses Serb ceasefire

Alliance vows to continue bombing until Yugoslav forces pull out of Kosovo and let refugees return

By Our International Staff

Nato allies last night dismissed a unilateral ceasefire by Yugoslavia as inadequate, and vowed to continue bombing until Belgrade pulled its troops out of Kosovo to let refugees return under Nato escort.

But the Yugoslav ceasefire was coupled with an announcement of immediate talks with Ibrahim Rugova, the moderate ethnic Albanian leader, on political autonomy for Kosovo.

With the peace overture given more weight by Mr Rugova's apparent involvement, the council of the 19 Nato allies was meeting last night in Brussels to discuss Belgrade's latest move, which earlier had been brusquely dismissed by Washington, London and Paris.

However, sources close to the Yugoslav government said President Slobodan Milosevic was worried about the mounting costs of Natós air campaign against his forces and by substantial damage to the countrýs infrastructure.

The announcement on Serbian television said that "on the occasion of the greatest Christian holiday, Easter" (which in orthodox Serbia is celebrated next Sunday) army and police would cease operations against "the terrorist Kosovo Liberation Army" at 8pm local time last night.

The statement referred to recent meetings between Mr Rugova and Mr Milosevic and Yugoslav ministers, at which it claimed both sides had agreed to work towards a peace agreement and the return of refugees.

Last night's statement reinforced the impression that Belgrade may have co-opted the moderate ethnic Albanian leader into its strategy of ridding Kosovo of the KLA, which in turn has suggested Mr Rugova may be committing treason against his people.

The statement also said that the Yugoslav federal and Serb republic governments, "together with those ethnic Albanians represented by Mr Rugova", would prepare a programme of refugee return with the aid of United Nations and Red Cross agencies.

But earlier in the day, Mrs Sadako Ogata, head of the United Nations High Commission for Refugees, attacked Yugoslavia for its practice of ethnic cleansing which she said was aimed at "destroying the collective identity" of "an entire civilian population".

The White House said: "A mere ceasefire is clearly not sufficient. We are going to continue to hit [Mr Milosevic] methodically and aggressively until he agrees to the conditions." These conditions call for a total pullout of Serb forces from Kosovo, and the return of all refugees protected by an international security force.

Chancellor Gerhard Schröder of Germany, President Jacques Chirac of France and Tony Blair, the UK prime minister, also said the Yugoslav ceasefire was a necessary, but not sufficient condition for Nato to call off its air offensive, now in its 14th day.

Meanwhile, Nato military officials said that on Monday the alliance had carried out its most intensive night of strikes, in four waves. But seven people were reported to have been killed and many more wounded when bombs, meant to strike an artillery unit in the town of Aleksinac, hit a residential suburb.

Nato said that a technical failure or possibly anti-aircraft fire could have caused the weapons to miss their target.

The Russian leadership described the Yugoslav ceasefire as promising, and later today a senior Russian official is to meet his western counterparts in Brussels in the six-nation Contact Group to discuss Kosovo. This would be the first such meeting since Moscow angrily broke off contact with Nato in response to the start of allied bombing.

Reporting by David Buchan in London, Guy Dinmore in Belgrade, Neil Buckley in Brussels and Stefan Wagstyl in Tirana

Kosovo crisis, Page 2
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An injured Serb outside the wreckage of his house after a missile fell short of its target during a Nato airstrike on the town of Aleksinac Picture: AP

Unheralded peace talks on political future of the Balkans

By Guy Dinmore in Belgrade

One surprise element in Belgrade's declaration of an Easter ceasefire in the conflict with the ethnic Albanian Kosovo Liberation Army (KLA) was the indication that the Serbs had been conducting serious negotiations with Ibrahim Rugova, the moderate elected leader of the Kosovo Albanian majority, in an effort to find the basis for a lasting political settlement to the conflict in the Balkans.

The government said both sides were working hard for an agreement that would enable refugees to return to their homes.

Mr Rugova is living with his family under what amounts to house arrest in Pristina, the capital of Kosovo, but was shown by state media meeting Mr Milosevic in Belgrade last week.

The KLA and western governments have suggested that Mr Rugova was acting under duress.

But an aide to Mr Rugova, contacted by telephone, said he had been misquoted by the media and had not simply called for an end to Nato air strikes.

Mr Rugova, the aide said, had called on Mr Milosevic to withdraw all his forces from Kosovo first.

Mr Rugova had also spoken by telephone to Javier Solana, Nato secretary-general, but the aide gave no details of their conversation.

Government sources said Mr Milosevic was attempting to split the ethnic Albanians, knowing that the KLA had eroded Mr Rugova's authority since launching its militant pro-independence campaign a year ago.

Milan Bozic, the Yugoslav minister without portfolio and deputy mayor of Belgrade, said Serbia's unilateral ceasefire offer meant the separatist ethnic Albanian guerrillas in Kosovo had been defeated.

"We're offering a unilateral ceasefire in Kosovo because we believe that the terrorists who used the Nato bombings to put pressure on our country are now virtually destroyed," Mr Bozic told Antena 1, a private Romanian television station, by phone from Belgrade.

One Belgrade analyst said he expected Mr Milosevic would eventually have to cede Kosovo but would present it as "a glorious defeat" to be compared with the historic loss of Kosovo in 1389 to the Ottoman Turks. "It is a question of timing and after what cost," he said.

Before announcing the ceasefire, Mr Milosevic was also in touch with Nelson Mandela, the South African president, in an effort to arrange a mediation bid, but Mr Mandela turned him down.

Warrant issued for arrest of Berezovsky

By John Thornhill and Andrew Jack in Moscow

The Russian prosecutor's office yesterday issued an arrest warrant for Boris Berezovsky, the controversial business tycoon and Kremlin power broker, who helped finance President Boris Yeltsin's re-election campaign.

The warrant was seen as an escalation in the power struggle between Mr Yeltsin and Yevgeny Primakov, the prime minister. Mr Primakov has long been an enemy of Mr Berezovsky, making him the prime target of the government's crack-down on "economic criminals".

Alexander Lebed, governor of the Siberian region of Krasnoyarsk who is campaigning to succeed Mr Yeltsin, said the dispute signified the "death throes" of the current powers. "Everyone has become tangled up and they are beginning to drown each other," he said.

The prosecutor's office, which has been investigating Mr Berezovsky's business interests for several months, accused him of syphoning money out of Aeroflot, Russia's biggest international airline.

But, speaking from Paris, Mr Berezovsky attacked the country's "shameless and dull-witted" law officers, vigorously denying their allegations. "They do not have any chance of success," he said.

The leader of a group of self-styled "oligarchs", Mr Berezovsky has accused the security services of conducting an illegal campaign to damage his reputation.

Mr Berezovsky, who was depicted in the press as a latter-day Rasputin at the court of Tsar Boris, lost his immunity from prosecution last week when he was fired as secretary of the Commonwealth of Independent States.

While Mr Berezovsky is in France he appears safe from attempts to return him to Russia to face criminal charges. There is no extradition treaty between France and Russia.

In a further twist in Moscow's political drama, Yuri Skuratov, the country's top law official, announced he would today submit his resignation to parliament for a second time.

The Federation Council, the upper house of parliament, had earlier rejected the his resignation, prompting Mr Yeltsin to dismiss him last week by presidential decree.

Mr Skuratov claims to have unearthed explosive information incriminating some members of Mr Yeltsin's closest entourage.

WORLD NEWS

WTO meeting hosts accused of 'selling government access'

International companies have been invited to help pay for the World Trade Organisation's ministerial meeting in Seattle, prompting claims that the city's host committee is selling access to government officials. **Page 16**

US concern over euro-zone policies Edwin Truman, a senior US Treasury official, attacked the 11-country euro-zone for its over-reliance on export-led growth which "imposes economic burdens on others". **Europe, Page 3**

Lockerbie bomb suspects charged The two Libyans suspected of causing the 1988 PanAm air crash at Lockerbie in Scotland were charged with murder, conspiracy to murder, and breaches of UK aviation law when they appeared before a Scottish sheriff in the Netherlands. **International, Page 7**

East Timor groups end ceasefire East Timor's chances of moving peacefully towards independence were eroded as pro-independence and pro-Indonesian groups issued calls to arms. **Asia-Pacific, Page 6**

Chile to make Pinochet trial case The Chilean government is set to argue that loopholes in its amnesty law mean a trial in Chile for General Augusto Pinochet could include the period when his dictatorship was at its most brutal. **Latin America, Page 4**

Russian market clampdown urged Russia's top stock market regulator called for tough criminal sanctions to help clamp down on abuses against investors. **Europe, Page 3**

Gore seeks Silicon Valley vote US vice-president Al Gore, who last month claimed to have "created" the internet, brought his campaign for the 2000 Democratic party presidential nomination to Silicon Valley. **US, Page 4**

China plans national cable network China plans to establish a country-wide cable network with the potential to provide both television and telecommunications services. **Asia-Pacific, Page 6**

BJP stands by defence minister India's Bharatiya Janata party-led ruling coalition attacked its critics as a crucial ally withdrew two ministers in a war of nerves over the regime's refusal to dismiss its controversial defence minister. **Asia-Pacific, Page 6**

Call for high Algerian poll turnout Mouloud Hamrouche, contender in Algeria's presidential election, stepped up pressure for a free election by calling for a big turnout. **International, Page 7**

Philippines inflation falls Much lower than expected inflation data for the Philippines for February have signalled further cuts in interest rates and highlighted the continuing slowdown of the country's economy. **Asia-Pacific, Page 6**

Ugandan cabinet reshuffled President Yoweri Museveni of Uganda has reshuffled his cabinet in what is being seen as an attempt to fend off accusations of mismanagement in the government. **International, Page 7**

BUSINESS NEWS

Reed Elsevier directors quit in row over new CEO

Reed Elsevier's troubled search for a chief executive officer erupted in acrimony after two directors of the Anglo-Dutch publisher resigned and discussions with the leading candidate for the job ended. **Companies and Markets, Page 17; Lex, Page 16**

The European junk bond market, which effectively closed down after the Russian debt default last August, has sprung back to life with a number of UK and continental companies launching high-yield bonds. **Companies and Markets, Page 17**

Japan's economy risks facing its first real bout of consumer price deflation this year because the prospects for economic recovery remain weak, Yutaka Yamaguchi, the Bank of Japan's deputy governor, warned. **Page 16**

Gillette, the US consumer products group known for its razors, suffered a sharp fall in its share price in early New York trading after a warning that first-quarter earnings would fall short of estimates. **Companies and Markets, Page 17**

Mannesmann, the German industrial conglomerate, is to broaden its attack on Germany's telecommunications market by operating the o.tel.o fixed-line business it acquired for DM2.25bn late last week as a separately branded operation. **European companies, Page 20**

Olivetti set a floor of 35 per cent on the minimum stake it would accept in Telecom Italia and said it would withdraw its €60.4bn ($65.2bn) hostile bid if TI shareholders approved the conversion of non-voting savings shares into common voting stock. **European companies, Page 20**

News Corp shares surged 12 per cent in Sydney after it announced that Liberty Media of the US, controlled by AT&T, would acquire about 8 per cent of Rupert Murdoch's global media group. **International companies, Page 22; Lex, Page 16**

A Paris court is to hear a complaint in the takeover battle between France's three largest listed banks – Banque Nationale de Paris, Paribas and Société Générale – on June 1, delaying the possibility of a quick outcome. **European companies, Page 20**

Dutch National Investment Bank shares remained above an offer price of €29.95 as ABP and PGGM, the country's two biggest pension funds, opened a Fl4.1bn joint bid for the state-controlled industrial finance vehicle. **European companies, Page 20**

Credit Suisse officials are trying to negotiate with Japan's Financial Supervisory Agency over the regulator's inspection of the bank's operations in Tokyo. **Companies and Markets, Page 17**

Euro Prices

A comprehensive statistical guide to the euro currency zone, covering foreign exchange, bond and equity markets. **Page 25**

WORLD MARKETS

STOCK MARKET INDICES		
New York: lunchtime		
Dow Jones Ind Av	9998.18	(-9.15)
NASDAQ Composite	2565.42	(+5.36)
Europe and Far East		
CAC40	4304.48	(+74.63)
DAX	4965.29	(+50.70)
FTSE 100	6415.3	(+85.3)
FTSE Eurotop 300	1274.34	(+13.27)
Nikkei	16,479.71	(+144.93)
US LUNCHTIME RATES		
Federal Funds	4.6875%	
3-mth Treas Bills: Yld	4.387%	
Long Bond	95⅜	
Yield	5.536%	
OTHER RATES		
UK: 3-mo Interbank	5$\frac{3}{16}$%	(5¼%)
UK: 10 yr Gilt	111.16	(110.298)
Euro Euribor	2.905%	(2.971%)
Germany: 10 yr Bund	98.83	(97.95)
Japan: 10 yr JGB	101.336	(101.75)
NORTH SEA OIL (Argus)		
Brent Dated	$14.475	(14.25)

GOLD		
New York: Comex	$279.6	(278.3)
London:	$279.05	(280.45)
DOLLAR		
New York: lunchtime		
£	1.5935	
€	0.9227	
SFr	1.4726	
Y	120.75	
London:		
£	1.5899	(1.6012)
€	0.9292	(0.9327)
SFr	1.4833	(1.4905)
Y	121.050	(121.925)
Tokyo Close		Y 121.6
EURO (London)		
$	1.0762	(1.0722)
£	0.6769	(0.6697)
Y	130.268	(130.726)
SFr	1.5963	(1.5961)

Euro-zone target price €2.15. Prices in local currency as shown

Bahrain	Din1.300	Iceland	Ikr265	Oman	OR1.75
Belgium	BFr90(€2.23)	Italy	L3900(€2.01)	Poland	Zl 10.00
CIS	US$4.00	Jordan	JD1.75	Portugal	Esc320(€1.60)
Croatia	Kn19.00	Kuwait	KWD0.750	Qatar	QR13.00
Denmark	DKr16.00	Latvia	Lat1.65	South Africa	R18
Estonia	EKr34.00	Lithuania	Lit21.00	Spain	Pta325(€1.95)
Finland	Fmk13.00(€2.19)	Lebanon	LBP3,500	Sweden	SKr20.00
France	FFr14.00(€2.13)	Luxembourg	LFr90(€2.23)	Switzerland	SFr3.50
Gibraltar	£0.85	Morocco	Dh16.00	Syria	S£80.00
Greece	Dr500	Netherlands	Fl 4.80(€2.18)	Tunisia	Din2.000
Hungary	Ft350	Norway	NKr19.00	UAE	Dh13.00

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KOSOVO CRISIS

AIR WAR IN EUROPE WESTERN ALLIANCE BLAMES 'TECHNICAL ERROR' FOR SERB CASUALTIES ■ TENSIONS GROW OVER PODGORICA'S ATTEMPT TO STEER A NEUTRAL COURSE IN THE CONFLICT

Homes hit as bombs miss targets

By Guy Dinmore in Aleksinac, Serbia

Bodies crushed under piles of rubble, flattened cars, apartment blocks riddled with holes, and a ruined ice cream factory... Serbia's southern town of Aleksinac bears the fresh scars of at least three "precision" bombs dropped by Nato aircraft that missed their target.

Seven simple houses in Drakceta Milovanovica Street in the centre of town were demolished when the bombs fell on Monday evening. Residents said seven people were killed, including one child. When foreign reporters got there yesterday morning, three corpses were still under the ruins.

A few hundred metres away, four houses in Vuk Karadzic Street resembled a demolition site. Dragan Miladinovic, 67, his wife Dragica and their 40-year-old daughter Snezana were dead, entombed together. Children's toys and school books poked out of the rubble. Further on and another misguided bomb had hit an industrial complex that included an ice cream factory and an animal feed plant. One night watchman was killed.

Scores of surrounding buildings, including a 24-hour first aid centre, had windows, walls and doors blown out by the blasts. Glass covered the streets. Police and residents said over 30 civilians had been injured. Rescue workers scattered yesterday morning as air raid sirens sounded once more.

About 1km away from Drakceta Milovanovica Street, what may have been Nato's intended target, a complex of old army barracks that had long been evacuated had also been partially destroyed. Another bomb had carved out a crater next to Serbia's main north-south highway that runs past Aleksinac but its four lanes were undamaged.

Nato put the deaths down to a "technical error" but western military analysts said heavy civilian casualties were inevitable as the western alliance stepped up its bombing campaign to force Slobodan Milosevic, Yugoslav president, to accept a peace deal for Kosovo province. Previous raids on city centres, such as two interior ministry buildings in Belgrade, had hit their targets with precision.

Air Commodore David Wilby of Nato military command insisted target planning was "meticulous". He added that "any unintended damage to civilian property or loss of life is very much regretted".

One western military attaché said: "There is no such thing as a surgical strike. "It's a journalistic myth."

Error or myth, the residents of Aleksinac, a poor industrial town far removed from the conflict in Kosovo some 100km away, reacted with horror and outrage.

"Nato is waging a coward's war," shouted one soldier, waving his knife at the sky. "Let them come and fight on the ground."

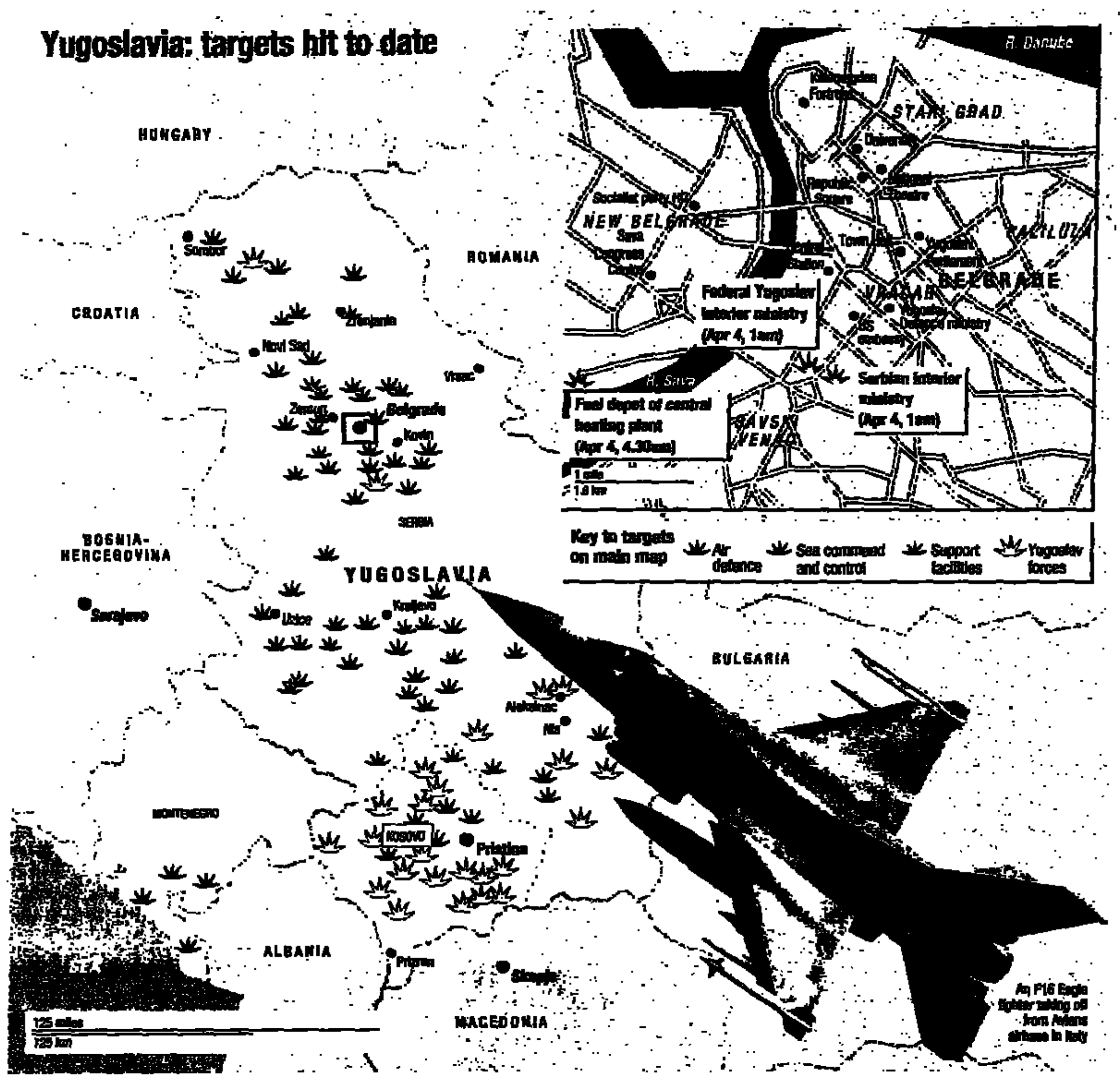
Vladimir Ieromin, caked in dust from scrambling through rubble, rolled up his trouser leg to show the wound inflicted when Nazi Germany's Luftwaffe bombed Yugoslavia in the second world war. Many Serbs, joined by the state media machine, are likening Bill Clinton, US president, to Hitler.

"I was a 16-year-old when I joined the partisans in the fight against the Germans," exclaimed Petronje Milovanovic as he wobbled past on his elderly bicycle. "Clinton and [US secretary of state Madeleine] Albright are whores. They can't scare us. I'm ready to fight again. Send my regards to Clinton," he shouted as he cycled on.

Vlada Stojilkovic had two apartments in Vuk Karadzic Street and was a neighbour to the dead family of three. He survived by chance, leaving home an hour before the bombs fell to visit his mother-in-law. "This is a war crime," he said in bitterness. "Why is Nato killing innocent people?"

Nato on Monday night also badly damaged a third bridge over the Danube river in the northern city of Novi Sad and destroyed a nearby oil refinery in a large ball of flame. The road and rail bridge was the last remaining link between the two parts of Novi Sad but can be crossed still by pedestrians edging their way past bomb craters.

Nato also began targeting television transmitters, blanking screens across the Yugoslav republic and depriving the government of its most powerful propaganda tool.



OSCE drive as refugee numbers grow

By Stefan Wagstyl in Tirana

The Organisation for Security and Co-operation in Europe is launching a mission to Moscow in the search for an end to the war in Kosovo, Knut Vollebaek, the OSCE's chairman, said yesterday.

Mr Vollebaek, the Norwegian foreign minister, plans to meet Vladimir Ivanov, his Russian counterpart, after visiting Albania, Macedonia and Romania. In Bucharest, he will meet Andrei Gabriel Plesu, the Romanian foreign minister, who chairs a southern European grouping, one of the few international bodies of which Yugoslavia is still a member.

"It is important that Russia should continue to be involved and we will see if there is any way that they can assist in finding a solution," said Mr Vollebaek in Tirana yesterday. He warned that Slobodan Milosevic, the Serb president, was aiming not just to purge Kosovo of ethnic Albanians but also "at destabilising the whole region".

Mr Vollebaek also condemned Serb attacks on Kosovar Albanians in the strongest terms so far used by the OSCE. "In some areas we have to talk about genocide. We have to talk about ethnic cleansing. We have to talk about barbaric acts against civilians."

Meanwhile, the flow of refugees into northern Albania continue unabated yesterday with an estimated 16,000 people crossing the border, down from Monday's revised 32,000 due to the Serbs closing one of the three crossings, taking the total to more than 280,000, according to the OSCE.

Despite the difficult mountainous terrain, aid agencies say they are now supplying virtually all the refugees with food and water and urgent medical help. However, the outflow of refugees from the region to elsewhere in Albania falls short of the border inflow – adding to the risk of disease in the crowded frontier town of Kukes.

Albania is redoubling efforts to secure international financial aid. While around 90 per cent of the cost of humanitarian aid is met by international agencies supplying food, emergency shelter, medicine and transport, the Albanian government will shoulder other burdens, such as providing education and long-term health care.

Gramoz Pashko, the prime minister's economic adviser, yesterday estimated that supporting refugees for six months could cost the government $150m-$200m, though he emphasised this was a preliminary figure. The EU has indicated it would give cash aid, though a decision has yet to be taken. The World Bank, which is sending a mission today to Tirana, expects to make a $15m-$25m loan, with more support coming from other international donors.

The country is in the middle of $60m three-year International Monetary Fund programme, which could be adjusted, even though IMF support is normally limited to financing external deficits.

Montenegro walks line between Milosevic and Nato

Matej Vipotnik reports on the tensions caused by Djukanovic's pro-western stance in the face of reported coup plans by Belgrade

About a mile from the Debeli Brijeg border post, anti-tank barriers and a makeshift roadside bunker manned by men in combat fatigues control the flow of traffic heading towards the border between Montenegro and Croatia.

The machine gun, however, does not face west, toward Croatia, but east, towards Montenegro. Debeli Brijeg is the only border post in Montenegro under the control of Montenegro's pro-western government, and the bunker is almost certainly there to protect the border post from the Yugoslav federal army.

The bunker is a tell tale sign of the tensions between the government of Milo Djukanovic, Montenegro's president, and the Yugoslav federal government and army, which are controlled by Slobodan Milosevic, Yugoslavia's president. Intelligence reports from the US and Britain last week indicated that the Yugoslav army was planning to mount a coup against the Montenegrin government, and Mr Milosevic recently replaced the head of the Yugoslav army in Montenegro with a reportedly loyal general.

While the government of Montenegro has condemned the airstrikes, it has also tried to foil attempts by the Yugoslav federal army to mobilise reservists in the tiny republic.

Nevertheless, the siren of Yugoslav nationalism is proving stronger to some draft-age Montenegrins than Mr Djukanovic's reasoned arguments about neutrality.

"I didn't like his politics before, but I like them now," said Igor Rajovic, a young businessman, about Mr Milosevic. He was speaking shortly before seeing off a friend who had volunteered for the Yugoslav army reserve.

"He [Milosevic] defends the nation, of course we'll be with him," added Miodrag Boskovic, the volunteer. Mr Boskovic, who is 20, had only recently finished serving his mandatory military service in Pristina, Kosovo.

At a mass rally and concert in Podgorica, Montenegro's capital, on Sunday night, up to 30,000 people echoed this line as they gathered to condemn Nato's air campaign against Yugoslavia. The gathering was a signal to Mr Djukanovic that his policy of neutrality in the face of western bombs, and his continued criticism of Mr Milosevic, are increasingly unpopular in his republic as the population rallies in patriotic support of Yugoslav institutions and army.

"We are prisoners – a bit of Milosevic and a bit of Nato," said Zoran Ljumovic, director of the independent radio station Antena M in Podgorica. He was referring to the surge in Yugoslav patriotism following Nato air raids.

The protests have perhaps defused the immediate threat of a coup, as popular support for Mr Djukanovic has apparently begun to wane. "You cannot mount a coup without a reason," said Mr Ljumovic.

Though the situation in Podgorica is outwardly calm, insistent rumors of a possible coup, and the presence of heavily armed police loyal to Mr Djukanovic guarding key government buildings, betray the tension among government officials.

The Yugoslav federal army, which has perhaps 12,000 men in Montenegro, has not been conspicuously visible in Podgorica. But federal army reservists in combat fatigues are a frequent sight and volunteers were seen over the weekend boarding buses for federal army bases in Montenegro's territory.

On two separate occasions in recent days, the Yugoslav army was reported to have placed its artillery on a hill above Podgorica, the barrels pointing at the city below. The guns were moved after the intervention of Mr Djukanovic's police.

Were the federal army indeed to attempt a coup against the Montenegrin government, the outcome could be a bloody civil war, local politicians have warned. Montenegro is a combustible mixture of Montenegrins, Serbs, Croats, Moslems and Albanians.

While many of the supporters of the opposition Socialist People's party, which toes Mr Milosevic's line, say their Serb identity makes loyalty to Serbia an imperative under Nato bombardment, other Montenegrins are trying to assert a national identity that harks back through the centuries of the independent kingdom of Montenegro.

In the event of a coup attempt, Mr Djukanovic and his government could count on the support of their police forces, and on those Montenegrins who are fed up with Mr Milosevic and are eager to see a pro-western or even independent Montenegro.

Both Nato and the UK government have issued stark warnings that Mr Milosevic would pay a hefty price if he moved against Montenegro.

Nato has already moved to foil any Yugoslav army attempts to send reinforcements into the mountainous republic by dynamiting a section of rail track connecting Serbia with Montenegro.

Mr Djukanovic has until now maintained that Montenegro only seeks independence and equal status with Serbia in the Yugoslav confederation. But were a coup to be mounted, he is likely to move towards independence, local analysts say.

Does the government expect Nato help in the case of a coup? "Officially no, unofficially yes," said one member of parliament from the ruling coalition, pointing to the strong support the US has lent Mr Djukanovic over the past year.

NEWS DIGEST

TURKEY PROVIDES SHELTER

Airlift takes thousand out of Macedonia

More than a thousand Kosovo Albanians were yesterday settled into prefabricated housing in western Turkey, among the first refugees from Serbian "ethnic cleansing" to be airlifted out of Macedonia.

Turkey, which has pledged to shelter a total of 20,000 refugees from Kosovo on its territory, feels historic and emotional ties with Kosovars, many of whom are moslems whose ancestors were once part of the Ottoman empire.

Bulent Ecevit, Turkey's prime minister, said yesterday that 5,500 refugees were now in Turkey, many of which, according to the United Nations High Commission for Refugees, have relatives in Turkey or fled there by their own means before this week's airlift. He said that Turkey would provide a total of 50,000 refugees with food and shelter either by taking them in or by sending food and tents to Macedonia and Albania.

Refugees arriving yesterday at Turkey's main refuge site near the town of Kirklareli told Reuters they were relieved to be out of Macedonia, a temporary staging post for many refugees. Mr Ecevit, who is busy campaigning for April 18 general and local elections, plans today to visit the area which is near Turkey's border with Bulgaria and where Ankara plans to house most of the 20,000 refugees.
Leyla Boulton, Ankara

FRANCE SOFTENS STANCE

Jospin offers temporary refuge

Lionel Jospin, the French prime minister, yesterday softened his government's stance on accepting Kosovar refugees, saying France was "available to receive temporarily on its soil a certain number". But he told the National Assembly that any arrivals should be on a voluntary basis and should be undertaken without splitting up families. "Do not let us add a forced transfer to a deportation."

Mr Jospin also announced a tripling of French aid to FFr225m (€34.3m, $36.8m), saying the money should allow the establishment of decent welcoming and living areas for refugees in Macedonia and northern Albania.

Mr Jospin said he was convinced the UN would have to play a role in the quest for a political and diplomatic solution to the Kosovo conflict. The UN would have to co-ordinate support operations for refugees and ensure their return once peace was restored. **David Owen, Paris**

UK RESPONSE

Search for accommodation

Local authorities in the UK have been told by the government to identify large public buildings and empty flats for a possible influx of refugees from Kosovo.

Tony Blair, prime minister, has warned against the "premature" evacuation of refugees from the Kosovo borders, arguing that it would assist the process of ethnic cleansing.

But it emerged yesterday that the Home Office has been drawing up contingency plans, and has urged town halls to identify short-term and long-term accommodation for Kosovars. The Local Government Association has been asked to provide "immediate help" in identifying large buildings – such as former schools – which might be used as residential centres.

The Home Office believes it would be best to locate new arrivals in areas which have already received some of the estimated 10,000 Kosovar refugees already in the UK.

William Hague, leader of the opposition Conservative party, urged the government to clarify its position on receiving refugees and to estimate how many the UK might "reasonably be expected to receive".
George Parker, London

'Present' to Russian nationalists

By John Thornhill in Moscow

Yegor Gaidar, Russia's first post-Soviet prime minister, warned yesterday that Nato's bombing of Yugoslavia had come as a "present" for Russia's extreme nationalists and could have alarming political consequences in Moscow.

"If the conflict is prolonged, I am absolutely sure that in a short period of time you will have a strongly anti-western, cold war-oriented regime in Moscow," he said. "There is nothing more important for Russia and Russian democracy than to bring hostilities to a stop."

Mr Gaidar, who led an unofficial peace mission to Belgrade last month, said the west had seriously miscalculated the repercussions of its air strikes on Yugoslavia. Nato's bombing had only strengthened President Slobodan Milosevic's regime and undermined the political opposition in Belgrade. It had also inflamed nationalist passions in Moscow, which could bolster support for the Communist party in the run-up to parliamentary elections in December.

The former Russian prime minister, who was strongly identified with liberal, western policies during his time in office, condemned Nato for attacking a sovereign state without proper authorisation from the United Nations. He said the attacks had produced a strong "social and psychological" reaction in Moscow, confirming Russians' worst fears about Nato's eastward expansion. Even the young, post-Communist generation was voicing fiercely anti-western views on Yugoslav-related internet sites.

"What is happening in Yugoslavia strongly influences developments in Russia. I think the west seriously underestimates the long-term consequences of its actions," he said in an interview with the Financial Times.

Mr Gaidar said he hoped hostilities could cease over the forthcoming Orthodox Easter holiday, enabling both sides to step back from the brink of a full-scale war. "Both sides are trapped in a situation where they cannot make one move in the direction of compromise without losing face," he said. "We have no illusions about [Yugoslav President Slobodan] Milosevic or his regime. But even in these circumstances you have to try to re-establish some kind of dialogue with him."

Although the Russian government has fiercely condemned Nato's actions, it has repeatedly made clear it will not be drawn into a military confrontation.

Speaking about Nato's bombing campaign yesterday, Boris Yeltsin, Russian president, said it was impossible "not to express indignation at this barbarism". But he suggested Russia would soon pursue fresh diplomatic initiatives to reach a peaceful solution to the crisis.

Mr Gaidar, who spent part of his childhood in Belgrade and speaks Serbo-Croat, said a peace deal could be based on the possible division of Kosovo. But he said future talks should include representatives of the Kosovo Liberation Army. "Unless the armed Albanians are recognised and given a chance to share power, then it is extremely difficult to see how this conflict can be ended," he said.

Irina Kobrinskaya, director of the Moscow office of the East West Institute, an independent political think tank, said Nato's attacks would undoubtedly encourage the drift towards tougher, more patriotic policies in Moscow. "This will not lead to a change of government but it will lead to a long-term change in the ideology of Russian foreign policy," she said.

But she noted that Russian television channels were now providing far more balanced coverage of the Kosovo situation, suggesting the country's media bosses were trying to prevent nationalist passions from running out of control.

Mr Gaidar said continuing hostilities in Yugoslavia also posed a threat to Russia's fragile economy.

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Germany to take 10,000 refugees

By Haig Simonian in Berlin

The German government yesterday said it would take 10,000 refugees from Kosovo as its contribution to the international resettlement effort.

The first of an estimated 700 initial arrivals is expected today in Bavaria as part of a complex burden-sharing arrangement between Germany's 16 states. Further refugees will be rehoused in North Rhine Westphalia – which is taking 2,200, the biggest share – and other states.

The first flight, expected to land in Munich or Nuremburg, will comprise old people, children in need of help or those requiring medical attention.

"It's our duty to help these people who've experienced so much suffering and misery," said Manfred Püchel, interior minister of Saxony-Anhalt.

The refugees will be housed in accommodation already used for the large flows of asylum seekers drawn to Germany. After a transitional period, the refugees will be rehoused locally. The refugees are expected to be given a restricted three-month residency permit pending their return to Kosovo.

Bonn said it was also stepping up humanitarian aid with about 15 daily flights of food and medical supplies to Albania and Macedonia. Rudolf Scharping, defence minister, said Germany had flown 500 tonnes of food, medicine, sleeping bags and tents to the two countries in the past week.

● A special conference of the governing Social Democratic party next week, called to confirm Gerhard Schröder, chancellor, as party chairman and heal differences after last month's surprise resignation of Oskar Lafontaine, risks being overshadowed by the Kosovo crisis.

The SPD said yesterday ample time would be devoted to discussing Kosovo. Many left-wingers, who oppose military intervention, have sharply criticised Germany's participation in Nato air strikes.

The Greens, the junior coalition partner in Mr Schröder's government, have already been forced to call a special conference to discuss the issue next month. The party, which has strong pacifist roots, has found itself bitterly divided over Kosovo.

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US voices concern over euro-zone policies

By Gautam Malkani in Washington

A senior US official yesterday attacked the 11-country euro-zone for its over-reliance on export-led growth which "imposes economic burdens on others".

Edwin Truman, assistant secretary for international affairs at the Treasury, also criticised European economic policies for aggravating problems.

"It is disconcerting that many of Europe's most persistent and troubling problems are, to borrow a term from medicine, – iatrogenic – physician induced," he said.

Speaking to the World Affairs Council, Mr Truman said the US was used to the consequences of its own large size and economic and financial responsibilities, "at least in the sense that we are used to being criticised for not being sufficiently sensitive to the effects of our policy decisions on the rest of the world".

Although he stated that the US government had no official viewpoint on European monetary union, he used the strongest language heard from the US administration and said others have "quite reasonably" questioned whether the project had gone far enough to allow a flexible mix of monetary and fiscal policy.

The US, although enjoying a buoyant economy which remains resilient despite the global financial crisis, has seen its current account trade deficit surge by nearly $100bn between 1996 and 1998.

Mr Truman said that over the same period the euro-zone had added $5bn to its external surplus. "In this context, recent expressions of concern in Europe about a prospective slowdown in export growth are disturbing." He called for the promotion of growth driven by domestic demand and welcomed Germanan policies to that effect.

Mr Truman also praised the UK, Denmark, Portugal and the Netherlands for following alternative growth-promoting paths such as structural reforms of labour, goods and financial markets "and tax policies that are more conducive to investment and employment".

He criticised measures to combat unemployment such as a reduction in legal working hours and early retirement programmes. "I was reminded of the words of the CBS news commentator Eric Sevareid: 'The chief cause of problems is solutions.'"

Countries which have lagged behind on reforms, including Germany, France and Italy, have had the worst investment and employment outcomes, he said.

"As exports decline and investment opportunities outside Europe are reassessed, investment demand in Europe is not now positioned to absorb fully the increased supply of savings."

Reduced government deficits to comply with Emu membership criteria in theory should lead to higher investment rather than trade surpluses, he said. But he added that convergence efforts prompted long overdue adjustments and "catalysed the macro-economic policymaking process in many countries in a beneficial manner.

"Europe as a whole has made impressive progress on its overall macro-economic framework over the past several years in the run-up to the birth of the euro."

Poor cousins joined in battle over aid

Pressure is growing on European Commission for a broader debate on state subsidies which many governments believe hamper trade and competitiveness, writes **Emma Tucker**

Inside the market

According to new figures from the European Commission, EU governments supported industry to the tune of €37.7bn ($40.7bn) a year between 1995-97. Stripping out the three member states that were not European Union members before 1995, the figure was €36bn compared with €40.5bn for 1993-95.

The drop looks moderately impressive. Unfortunately, it is almost entirely due to a tailing off in aid payments to Germany's former communist states. Without this, overall subsidy levels to EU industry have barely budged since the beginning of the decade.

When the figures were released last week, the Commission did its usual hand-wringing. "I am convinced that this level of spending continues to distort competition and trade and thus undermines the advantages offered by economic and monetary union and the single market," said Karel Van Miert, the competition commissioner, whose job it is to root out unlawful state aid.

The damage done to the single market by state aid is pernicious. It allows countries to protect non-viable businesses thereby providing them with the means to export unemployment to their neighbours.

Worse still, overall levels are more likely to go up than come down, not least because of the single currency. "Government support in the form of national state aid now remains one of the few means available for companies to seek protection from competition that will be even more intense than in the past," say the conclusions to the Commission's Seventh Survey on State Aid.

Faced with the seemingly unshiftable subsidy load some governments are calling on the Commission to rethink its battle tactics which tend to focus on individual cases rather than general levels. "It is time to initiate a broader political debate on the perverse effects of all this state aid," said one EU diplomat.

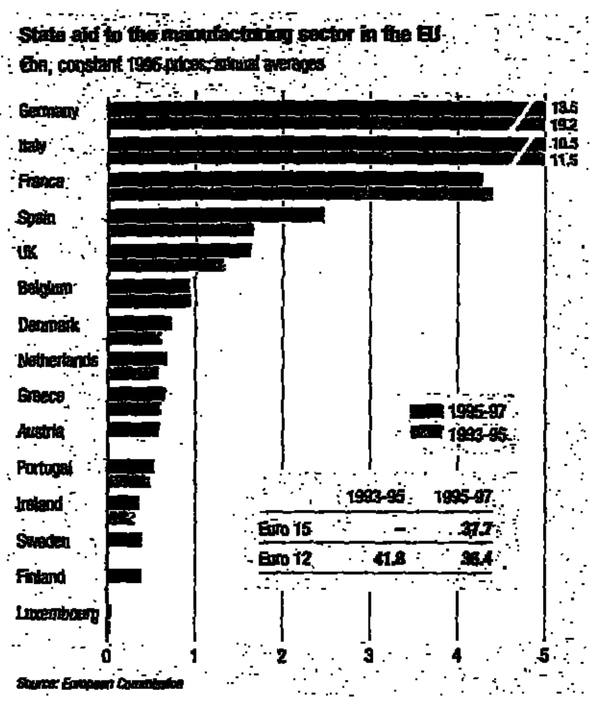
What is interesting is that it is not just the usual suspects – i.e low state-aid Britain – calling for a change of tack.

The EU's poorest "cohesion" member states are also unhappy pointing out that they cannot compete with the EU's biggest and richest spenders. Between 1995 and 1997 Germany, Italy and France accounted for 77 per cent of all aid to industry. Greece, Ireland, Portugal and Spain – the four cohesion countries – accounted for 11 per cent.

The poor cousins argue that high spending by wealthy countries blunts the effects of the special cohesion funds, supposed to help bring their own economies up to scratch.

One idea making hesitant progress is to invite finance ministers into the state aid debate, traditionally the preserve of industry ministers. They could then be encouraged to give binding commitments to reduce overall levels of aid rather as they did with the Maastricht criteria on inflation, deficits and debt.

For this to happen those most addicted to state support would have to come on board. Last week Werner Müller, Germany's acting finance minister, called on industry to agree to scale back state subsidies in return for cuts in corporate tax rates – a first sign perhaps that Germany is willing to wean its industry off the state aid drug.



France, however, shows no sign of giving up its right to intervene wherever and whenever possible. It is truculent about moves to have state aid debated within a broader economic context.

The Commission is gently pushing the broader debate. It has invited member states to "consider the level and appropriateness of public intervention in market activities and to fix precise objectives and a timetable for the reduction of overall aid budgets".

It is also pursuing reforms that will allow the Commission to free itself of routine cases of aid and to focus on the really distortive ones. Moreover, it has elevated the status of subsidies within the competition directorate by giving its new deputy director general – Jonathan Faull – special responsibility for state aid.

It will be up to Mr Van Miert to impress upon his successor – due to take over at the end of this year – the importance of the subsidy battle. He need only remind him or her what the arrival of countries such as Poland, Hungary and the Czech Republic into the EU will do to today's already high levels of aid to demonstrate convincingly the need to get cracking on existing members now.

Call for action over Russian market abuses

By Andrew Jack in Moscow

Russia's top stock market regulator yesterday called for the introduction of tough criminal sanctions to help in his fight to clamp down on abuses against investors and to impose a fairer financial system.

In an interview, Dmitri Vasiliev, head of the Federal Commission for the Securities Market, called for a modification to the country's criminal code to introduce a sentence of up to five years' imprisonment for unauthorised individuals carrying out financial services activities.

He also called for criminal penalties for companies which did not disclose to the market the full financial information that is required of them, or for those which illegally issued securities.

The moves could help to strengthen Russia's system for protecting investors in quoted companies, who have traditionally suffered from widespread abuses including actions to ignore their voting rights and dilute their shareholdings through the issue of new shares without their consent.

"The situation still remains very complicated for minority shareholders," said Mr Vasiliev.

"I would not say it is positive, but compared with the situation in the past we have made several steps forward."

He urged investors to pursue their cases more frequently through the legal system. "If you want to have your rights protected, you have to fight," he said. "If people fight, success is quite possible."

He added that 125 court cases had been brought by his Commission over the last year, and that it had won in three-quarters of them. Prosecutions had taken place. Mr Vasiliev stressed that Russia's recently introduced investor protection law had strengthened their hand.

The legislation requires any new share issues by companies to be approved by a two-thirds majority of all shareholders, rather than simply by the board as in the past.

He said there was the need to modify Russian bankruptcy procedures, which "still give room for violations", arguing that there are now too many "pseudo-bankruptcies" which were granted too easily and which could be a way for companies in trouble to avoid paying their creditors.

Mr Vasiliev, who criticised the Russian government's default on its GKO securities last August, also renewed his criticism of the country's Central Bank.

Slovaks to reform capital markets

By Robert Anderson in Prague

The new Slovak government is to propose a wide package of reforms to improve the reputation of the country's capital markets and increase foreign interest in Bratislava's small stock exchange.

The SAX index of top stocks hit an all-time low last month and share trading fell to only Sk58m ($1.4m) a day. Foreign investors now represent only 13 per cent of trades and domestic investors prefer the higher-yielding bond market. Economic and political instability and poor corporate performance are most to blame but investors have also been deterred by the secretiveness of Slovak companies and untransparent share trading.

"The capital market is not performing its function," said Michal Horvath, director of the finance ministry's financial markets section. "Its prices do not reflect true value and Slovak companies do not have the opportunity to raise capital by issuing new shares."

Changes to the Securities Act and the Commercial Code will improve the protection of minority shareholders and cancel bearer shares which allow owners to remain secret.

The ministry also expects to complete a new Stock Exchange Act by the end of the year, which – together with new bourse regulations – will impose stricter disclosure rules on listed companies and force illiquid stocks to delist.

Finally, in 2001 the ministry intends to set up a super regulator covering the stock market, insurance companies and banks. To increase the volume of domestic share trading the ministry will this summer submit a law on collective investments which will secure the legal position of investment funds and also pave the way for the future establishment of pension funds.

World stock markets, Page 38

Gore seeks Silicon Valley vote

By Roger Taylor in San Francisco

Vice-President Al Gore, who last month made the unfortunate claim to have "created" the internet, yesterday brought his campaign for the 2000 Democratic presidential nomination to Silicon Valley.

The trip, to raise support and money from the area's computer industry, is planned to coincide with the launch of Mr Gore's website and his online campaign.

Mr Gore, a long-term champion of the technology industry and the internet, plans to make full use of the web as a campaigning tool. Wade Randlett, political director for Technet, the Valley's leading political lobbying group, is a Gore supporter and has been advising the Gore camp. He believes this election will see the internet used as a campaign tool and expects Mr Gore to be at the forefront.

He is planning a series of online chats and webcasts at which supporters will be asked to demonstrate their support by registering their e-mails at the Gore website. The campaign can then continue to organise and communicate with these people through the web.

However, the campaign in cyberspace has got off to a slow start. The website, which has been set up later than some of his competitors, has been delayed by "squatters" who bought up the rights to the most useful web addresses, many of which are now used to sell unofficial Gore T-shirts and buttons. Mr Gore has had to pay for the right to use www.AlGore2000.com.

Mr Gore is in friendly territory among the Silicon Valley technology industry and northern California's liberal community. The area firmly supported the Clinton-Gore ticket in past elections.

But when he arrived in California on Monday, he was quickly reminded to take nothing for granted. The San Jose Mercury News, Silicon Valley's leading newspaper, ran a full page advertisement calling for George W Bush, the governor of Texas, to seek the Republican presidential nomination. The advertisement was signed by 50 local business leaders including Jim Barksdale, chief executive of Netscape, Floyd Kvamme, the venture capitalist, and Jeff Henley, vice president of Oracle.

Silicon Valley's traditional attitude of indifference to national politics is changing fast. Issues such as the call for more visas for overseas workers, continued tax relief on share options, and greater protection from frivolous shareholder law suits, have made industry leaders aware of the need to influence events in Washington.

For politicians, this means an opportunity to tap the enormous wealth of the industry. Yesterday evening, Mr Gore was due to hold a fund-raising party – which aimed to raise about $400,000 – for 330 of his supporters.

A long time ago, in a galaxy far away, they used projectors

But maybe not for much longer: George Lucas is going digital, reports **Christopher Parkes**

Star Wars: Technological progress means digital projection systems will some day replace celluloid, as starfighters replaced biplanes

Director George Lucas, who made special effects truly special and fostered a new cinematic genre with *Star Wars* more than two decades ago, is back in ground-breaking mood.

Star Wars: Episode 1 – The Phantom Menace, the first of three "prequels" to his best-known works, will in June become the first film to be shown commercially on the big screen in digital format.

While most audiences will see the work projected in traditional fashion – with technology essentially unchanged for more than 100 years – projection booths in four US cinemas, probably in New York and Los Angeles, are to be specially equipped to demonstrate the digital projection systems which will eventually displace celluloid.

Affirming his transition to the new era – and his reputation as a man ahead of his time – Mr Lucas will film the next two *Star Wars* productions entirely digitally.

Even though the world's 60,000-odd screens still rely on celluloid, he is pressing on. As he told theatre owners last month, he had been convinced by the medium's "quality, savings, and the ability to do things that just aren't possible today".

For the moment, he stands alone at the side of projection technology pioneers Texas Instruments and Cinecomm, a consortium effort involving the Qualcomm telecommunications group of the US and Hughes-JVC, based in Japan, which gave international exhibitors a glimpse of their systems at work in March.

Although much of the necessary technology has evolved over the past 15 years, the complexities of the essential final stage – the projector – have been mastered only recently.

Shown side-by-side with conventional films, the displays impressed delegates. Although the consensus appeared to be that digital images projected from tapes and discs through complex arrays of revolving mirrors and prisms still fell short of 35mm film quality, viewers with experience of earlier efforts were surprised.

"Two years ago I believed we were 15 years away from 35mm quality and full-scale conversion to digital: now it's five years or less," said one.

The technology's attractions are many. On the cost side, a copy of a film stored on a CD-like disc or digital tape will be far cheaper and easier to handle and distribute than reels of celluloid, which cost about $2,000 a print.

Simultaneous transmission via satellite to projection booths or cinema-based servers from a single source would save more in distribution costs.

Consistency of quality, with an end to degradation by scratches and film breaks and colours faded by the projectors' xenon arc lamps, is another consideration which appeals to film makers.

Yet the mainstream studios and exhibitors are in no hurry to embrace the new technology. Hollywood has a history of resisting change: it took more than 10 years to reach a viable consensus on the introduction of films for home viewing on digital video disc, now selling strongly in the US and moving into Europe. The arrival of the video cassette recorder – analogue technology which now produces revenues from video tapes worth more than global box office film receipts – was fought with lawsuits.

However appealing the cost savings may be, the industry is concerned that encryption techniques and cinema security offer uncertain defences against copyright pirates whose activities today cost it an estimated $3bn a year in "stolen" revenues. Video piracy in some Asian countries and other developing markets has reached such a pitch that some industry experts believe that conventional cinema has little hope of becoming established.

In these circumstances, the prospect of releasing digital products, amenable to flawless and endless reproduction, is unthinkable without stronger safeguards.

Cinema operators are also reluctant to press ahead at speed, in part because the cost – between $85,000 and $100,000 per unit compared with $30,000 for a conventional projection booth – will strain finances already stretched by their spending on megaplex construction.

They are also concerned that the studios and their film distributors stand to gain most from the savings offered by the technology and expect Hollywood at least to share the investment cost in new plant. "Who is going to pay to retool 60,000 screens?" asked one executive from a leading international chain. That argument alone would take 10 years to settle, he suggested.

Conscious of the concerns, the projector developers have opted for a softly-softly approach. Paul Breedlove, cinema programmes director with TI's digital imaging division, said at ShoWest that its demonstration was "in many ways just another milestone – albeit an important one".

There was still much systems work to be done before digital projectors would be installed at local cinemas. "However, we believe there could be hundreds installed within two or three years... perhaps thousands within three to five years," he said.

Most important, the feedback from the demonstration confirmed "we are very much headed in the right direction". And, he might have added, at an acceptable pace.

Chile to press Pinochet claims

By Mark Mulligan in Santiago

The Chilean government is today likely to argue that loopholes in its own amnesty law provide a better chance for General Augusto Pinochet, the former dictator, to be tried for human rights abuses in Chile rather than in Spain.

Foreign Ministry officials and lawyers said the government would stress that the laws, which protect Gen Pinochet against prosecution, only cover 1973-78, the most brutal period of his military dictatorship.

Lawyers said the government might also argue that Chilean courts' interpretation of the Geneva Convention meant that Gen Pinochet, as head of state, could even be prosecuted for crimes committed during the amnesty period.

The UK's law lords ruled two weeks ago that the retired general enjoyed international immunity from the excesses of his regime until 1988, when the country voted for a return to democratic rule.

"Chile will argue this time that it can prosecute for a broader period," said José Zalaquett, a human rights lawyer and an architect of the country's Truth and Reconciliation Commission, established in 1990.

Government lawyers will today present their latest arguments for the return of Gen Pinochet to Jack Straw, the UK interior minister, ahead of next week's decision on whether or not the general will be extradited to Spain to face charges of torture and conspiracy.

Mr Straw has until April 15 to reconsider his decision to allow Spain to seek extradition but UK government officials say he is not expected to reverse his original decision last December to give the courts an "authority to proceed" with consideration of the Spanish extradition request.

Pinochet: decision next week

Gen Pinochet has been detained in London since October 16 on a warrant for extradition presented by Baltasar Garzón, the independent Spanish prosecutor. Claims by José Miguel Insulza, Chilean foreign minister, that Gen Pinochet would face justice at home were dismissed by lawyers and opponents of the former dictator during the early days of his detention.

However, the government's insistence that he can be tried in Chile, along with changes in the composition of the Supreme Court and the decision last week by the independent State Defence Council to study 18 cases of "disappearance" against Gen Pinochet, have swayed public opinion in favour of a Chilean solution.

The Catholic Church has also called for justice as the only answer to divisions in society. "I think the Chilean government has a strong case this time," said Mr Zalaquett. "It's one thing to leave Pinochet liable to prosecution for a few scattered cases after 1988, where the ground may not be so solid. It's another to allow a broader prosecution, even if there are doubts about Chile's ability to try him."

Signs of record year in vehicles

By Nikki Tait in Chicago

The robust US economy and strong levels of consumer confidence paid off again for the car and truck industry last month, with Ford, the second biggest vehicle maker, announcing a 13.6 per cent rise in light vehicle sales, a record for the month.

The Ford numbers beat the most optimistic analysts' predictions, and the 399,908 cars and trucks which were either purchased or leased meant that March was the second month in a row during which the company posted an all-time sales record.

The company said that, in response to the strong consumer demand, it would increase second-quarter production by a further 20,000 trucks and 10,000 cars. It had already announced last that it would boost production by 2 per cent over last year's second quarter, taking production to about 1.212m vehicles in total.

Ford's results yesterday follow some equally bullish March sales figures for the Chrysler brand – now part of the DaimlerChrysler group – last week. The German-American company said its March figures were up by 16 per cent, helped by strong sales of minivans and sports utility vehicles.

Non-US manufacturers also fared well last month: Volvo Car, acquired by Ford last month for $6.45bn, said yesterday that its US car sales climbed 13 per cent in March.

General Motors, the biggest car and truck maker, will release its figures today. It, too, is expected to post buoyant sales – although the month last year was also strong, so the year-on-year rise may be less marked.

The extremely healthy first quarter sales have already encouraged some analysts to suggest that 1999 will be a record year for the industry. In 1998, the US manufacturers saw their second highest sales year ever, with 15.6m cars and trucks sold. That was bettered only in 1986, when the figure reached 16m.

Initially, analysts had taken a more cautious approach to 1999, suggesting that sales could slip back slightly, given the length of the current upswing in what is traditionally a cyclical business. But, as the months tick by, many forecasters are rethinking their projections and some Wall Street estimates now suggest that 1999 sales will top the 16m level.

Mitch is long gone – but Honduras disaster still looms

Five months after the hurricane, life remains precarious and rain is on the way

By James Wilson

In the Reparto neighbourhood high above Tegucigalpa, Roberto Guerra points to the debris strewn outside his front door, a reminder of Hurricane Mitch.

But the rocks and rubbish have not been here since October's hurricane – they cascaded down the steep, rutted streets months later, when the Honduran capital was once more hit by just a few minutes of fierce rain. Reparto was left to clean up once more.

Five months have passed since Mitch brought death and destruction to every part of the country, but life is still precarious for thousands of Hondurans. And though Tegucigalpa's problems may be the most visible to the government, and to the foreign volunteers and aid officials who keep its hotels filled to the rafters, many of its most devastated areas appear far from the head of the queue for help.

Still looming over Mr Guerra's house in Reparto is the landslide caused by Mitch last October, which obliterated the homes of 50 neighbours and buried his car. The slide brought down the main road through the community, cutting a vital bus link, and wrecked water pipes.

Mr Guerra says workers from the government's social investment fund came and cleared his street, but they dug down so far that they ruptured sewerage pipes. By February, water links had not been restored.

Mud is piled perilously above the side of the road, washing down each time it rains.

"Since then no one else has come," says Leislado Montoya, a neighbour.

The problems caused by the recent rain are for many a disturbing foretaste of more chaos when the fast-approaching rainy season begins in earnest. The many landslips such as the one at Reparto remain unstable; rain could set off further slides.

"We do not know what is going to happen in the next rainy season. There is a lot of concern about flooding," says Paul Trapido, an Inter-American Development Bank official.

There are signs of progress, witnessed by Bill Clinton on his recent visit. The US president saw one of the city's most important bridge links restored with the help of US troops. Most areas do now have water. The worst fears of a breakdown of social order have not so far been realised.

But basic challenges remain, not least in providing housing. Homeless families have been moved out of schools and into "macro-shelters", collections of low wooden huts holding 1,000 people, where families have one small room.

Residents at the first such shelter complained of lack of sufficient taps and sanitary facilities, and said the site would turn into an ugly sea of mud during the rainy season. The shelter also got off to an inauspicious start when metal sheet roofs blew off the day after the first families arrived.

Gabriela Núñez, the finance minister and one of the main figures in the president's "reconstruction cabinet", says the aim is to have permanent solutions within 12 months. But the government has a number of obstacles to overcome even before embarking on the much-needed housing programme.

The state owns few areas of suitable land in Tegucigalpa, and until Mitch the government was constitutionally barred from paying market rents for new plots. Even the first macro-shelter has been put up on a site rented from a pension institute. The administration has now secured a two-year window in which to buy the necessary terrain. Housing sites will be based on land use studies being conducted in every municipality.

However, residents are already deciding that there are better options than a long uncertain wait. They have begun to move back to affected areas, disregarding a new law to keep housing well away from river areas.

In the middle-class Loarque suburb, where two streets simply disappeared during Mitch, Mario Ochoa's house was full to the ground floor ceiling with water. But the bank official won an insurance claim, made repairs and moved back in, even though his property is closer to the river than the new law allows. "The laws are not obeyed in this country," he says.

Similarly, in the poor Pedregal neighbourhood, practically in the river bed, rough dwellings have quickly sprung up again, built of logs like small stockades. Clementina Pérez and her family have returned to the spot where their first home stood until it was swept away by the river.

The Trebol macro-shelter is only a few hundred yards away, but Mrs Pérez says the shelter rules are too strict. "They won't let you keep animals," she says, pointing to her few chickens scratching through the rubbish.

Even if the new laws on vacating dangerous areas were enforced, they do not apply to the many public buildings that were also inundated. Workers have been patching up the education ministry, much of which vanished downstream in the floods.

The building will return to use, albeit with an important modification: what remains of the ministry's basement-ful of archives will be moved to the safety of the third floor.

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Signs of record year in vehicles

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ASIA-PACIFIC

Beijing plans national cable network

By James Harding in Shanghai

China plans to establish a national cable company in an attempt to create a country-wide cable network with the potential to provide both television and telecommunications services.

The State Administration of Radio Film and Television together with local cable television stations plan to form the Cable Television Network, state media quoted a government official saying yesterday.

China's cable TV market has emerged as probably the largest in the world. Official figures show 756 cable TV stations with 70m customers at the end of 1997, while private estimates suggest the number may already be as high as 100m. The number of cable subscribers has multiplied largely because cable access is offered to Chinese consumers at a very low price.

The large and growing subscriber base has also prompted growing interest from foreign investors. A number of US companies are in exploratory joint ventures, looking to sell technology to upgrade the capability of the cable network, while foreign TV shopping channels have set up in China to tap into Chinese consumers at home.

China's fragmented cable TV industry is made up of hundreds of local and regional cable service providers. The establishment of a national cable network with the potential to offer both TV access as well as internet and, ultimately, telephony services could introduce more competition into China's telecommunications market and threaten to erode the domination of state-owned China Telecom.

The cable network "was always the sleeping giant in terms of competition in the telecommunications industry in China", Duncan Clarke at telecoms consultancy BDA said yesterday. The plans to establish a national cable company, he said, could result in the "emergence of a new network service provider".

However, while consolidation of the cable TV industry has huge potential, other analysts caution there are just as substantial obstacles to marrying together hundreds of cable network companies owned by different branches of regional, local and municipal government, offering different services and achieving very different financial results.

Chen Xiaoning, director of the information department at the State Administration of Radio, Film and Television was quoted by the official International Finance News yesterday announcing plans for the new venture, but did not offer a timetable for its establishment.

US policy on China, Page 14

China may stick with Keynesian path of economic expansion

Yardsticks that Beijing does its best to play down show a country in acute fiscal pain. **James Kynge** reports

Conventional wisdom has it that China is insulated from Asia's economic crisis because it can continue – if it wishes – with a Keynesian infrastructure spending package for several years to come.

Widely accepted statistics are used to confirm this view. The budget deficit this year will amount to just 1.8 per cent of gross domestic product, a level that would qualify the country for entry into the European Monetary Union. Total domestic debt is less than 10 per cent of gross domestic product – another eminently respectable ratio.

But employing such statistics to measure China's fiscal health is akin to "climbing a tree to catch fish".

Yardsticks that Beijing does its best to play down show a country in acute fiscal pain. The main problem is that central government revenues last year accounted for just 12 per cent of GDP – well below the developing country average of around 32 per cent and reminiscent of the picture in Russia.

This has meant that China's ability to service its domestic and foreign debts is compromised. For example, 60 per cent of RMB548.3bn ($66bn) in total central government revenues last year came not from tax collection but from the issuance of debt. Of the debt raised, 70.9 per cent went on servicing and financing redemptions of other debts.

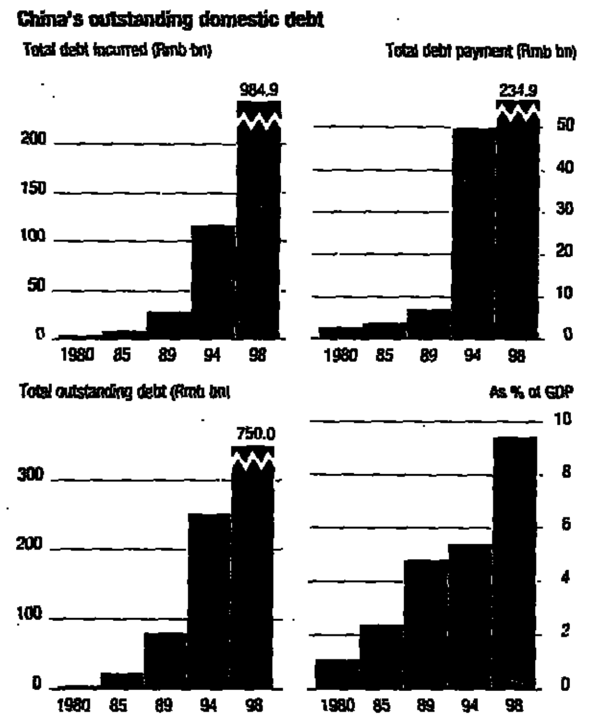
"The fiscal situation is at the core of our worries," said one analyst at a foreign multilateral organisation in Beijing.

Weak central government finances have impinged on Beijing's power to conduct macro-economic policy.

China's ability to pursue its fiscally-driven infrastructure package, which officials claim is the main engine of economic growth, is limited. Liu Rongcang, director of the institute of finance and trade economics at the Chinese Academy of Social Sciences, said it would be risky for Beijing to extend its active fiscal policy beyond this year.

Officials, who declined to be identified, said the finance ministry was reluctant to authorise this year another special bond issue to match the RMB100bn in infrastructure bonds launched last August. But, they added, the ministry was resigned to doing so if the wider economy begins to show marked signs of a slowdown.

China's outstanding domestic debt



China's treasury bond issue

Rmb bn	1990	91	92	93	94	95	96	97	98*
Planned issue	19	19	38	37	102	150	195	143	280
Actual issues	28	28	43	38	114	154	223	241	590
Year-on-year increase (%)	43	0	54	-12	198	35	45	8	145

Sources: PBoC; JJSA Global Emerging Markets; China Statistical Yearbook * estimates

The sense of reluctance to launch another Keynesian package coincides with mounting criticism in the official media over how the infrastructure money is being wasted. If the experience in Beijing is any guide, much of the funds are being funnelled into projects with little prospect of a return.

Workers from the countryside are now a common sight in China's capital, digging up paving stones only to lay others in their place and uprooting trees merely to replant them nearby. "It really looks like the 'New Deal'," said one foreign diplomat, referring to President Franklin Roosevelt's famous pump priming spree in the US in the 1930s.

But even as money is spent trying to reverse an economic slowdown through pump priming, strains on government finances are growing from other sources.

The swelling ranks of workers laid off from collapsing state enterprises, which employ around 60 per cent of the urban workforce, represent a mounting burden for a state which has promised to guarantee a basic wage.

Officials said that even the government's forecast of a RMB150bn budget deficit this year, an increase of 56 per cent on last year and the largest shortfall in two decades of reform, may prove too conservative.

From a different perspective, the fiscal shortage is limiting the government's freedom to regulate the pace of state owned enterprise reform because it simply cannot afford to waste money keeping inefficient industries afloat, Mr Liu said.

When a factory is making a loss it is usually either bailed out by state bank credits or by local authorities, using their own tax revenues. But it costs much more to keep a factory in operation than it does to pay its laid off workers a minimum wage of typically about RMB200 ($24) a month.

This means that many local governments opt to close down inefficient factories rather than spend scarce revenues on keeping them running at a loss.

Such is the passive force driving much of China's state-owned enterprise reform.

With this backdrop, it is not surprising the finance ministry has made it a top priority to raise revenues as a percentage of GDP.

Xiang Huaicheng, finance minister, is believed to have made a private target of raising central finances to 20 per cent of GDP by the time his five-year term is up in 2003.

But, paradoxically, an overriding priority this year to maintain social stability and stimulate the economy has forced the government to tailor a relatively slack tax regime. Total tax receipts by central and local governments are expected to grow by just 4.8 per cent to RMB953.3bn, compared with a 10 per cent climb last year and a gross domestic product growth forecast this year of 7 per cent.

BJP stands by defence minister

By Amy Louise Kazmin in New Delhi

India's Bharatiya Janata party-led ruling coalition yesterday attacked its critics as a crucial ally withdrew two ministers in a war of nerves over the regime's refusal to dismiss its controversial defence minister.

The showdown has its origins in the decision three months ago by George Fernandes, defence minister, to sack Admiral Vishnu Bhagwat, the Navy chief.

Mr Fernandes gave little public explanation for the sacking other than to say that Admiral Bhagwat had defied civilian authority.

Since then, one of the BJP's most eccentric allies, J. Jayalalitha, a Tamil Nadu-based former film star who commands the loyalty of 18 parliamentarians, and the opposition Congress party have seized on the event to harass the coalition, demanding the formation of a joint parliamentary committee to investigate the dismissal.

Ms Jayalalitha has raised the stakes in the last few days, threatening to withdraw her support for the government unless Admiral Bhagwat is reinstated and Mr Fernandes transferred to a less sensitive ministry.

On Monday, she withdrew her AIADMK party's two ministers from the government's council of ministers after the cabinet rejected her demands, a step that falls short of a full withdrawal of support for the coalition.

Threatened with the loss of 18 votes, the BJP has begun to woo smaller parties that could help it survive a trial of strength in parliament when the legislature resumes its budget session on April 15.

The political uncertainty shaved 4.5 per cent off the BSE 30 index on Monday. Yesterday, however, the index closed 1.4 per cent up at 3569.47.

BJP leaders have insisted that they will be able to survive a confidence motion if necessary.

Mr Fernandes has also attempted to deflate the criticism with an emotional defence of his decision to remove Admiral Bhagwat. He said yesterday that the Navy chief was sacked for defying the government's authority, "and for exposing, and by that exposure jeopardising, a security-related, top secret project which is very vital to the nation's security" – widely believed to be a nuclear submarine. He dismissed calls for a further inquiry.

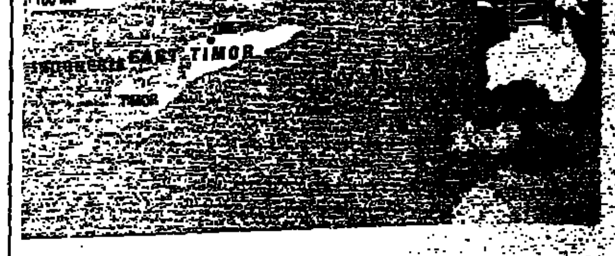
Ms Jayalalitha is planning talks in New Delhi on April 12 for talks with national politicians to discuss political arrangements, in the hope of striking a deal with the Congress party.

But many analysts say Ms Jayalalitha, who has threatened to withdraw support from the government several times before, may have miscalculated. While some Congress members want to help topple the BJP coalition, others, including Sonia Gandhi, the party president, are said to favour waiting until after assembly elections in the autumn.

"Sonia wants to make the BJP more uncomfortable but she doesn't want the BJP out," said Subhash Agrawal, a New Delhi-based political risk forecaster. He believes Ms Jayalalitha has given the BJP a week to agree a reconciliation with her and make a face-saving gesture.


Fernandez: made an emotional defence of his decision to sack Admiral Bhagwat

However, Mahesh Rangarajan, a political analyst, said he thought the relationship was at breaking-point.



Fears over new call to arms in East Timor

By Sander Thoenes in Jakarta

East Timor's chances for moving peacefully towards independence eroded yesterday after both pro-independence and pro-Indonesian groups on the island issued a call to arms.

East Timorese and foreign diplomats said renewed unrest on the island could give Indonesia's military grounds to move in more troops, upsetting efforts by the United Nations to organise a plebiscite, agreed with Jakarta last month, that would decide whether East Timor gains more autonomy or secedes altogether.

Jose Alexandre 'Xanana' Gusmao, the jailed leader of the East Timorese rebels, on Monday ordered his troops to end a ceasefire and take "all necessary action in defence of the population of East Timor" against attacks by pro-Indonesian paramilitary and the Indonesian military. Mr Gusmao also called for a "popular insurrection against the armed militia groups".

Mr Gusmao, who is *de facto* East Timor's head of negotiations with Jakarta, has accused the military of arming and leading the paramilitary groups into attacks on pro-independence activists in recent months. He had earlier called on his people not to react but changed his position after an attack by pro-Indonesian militia on Monday claimed at least two lives.

Another 20 were wounded in shootings in the same town yesterday.

The military has denied arming the militia but has balked at disarming them as well. Diplomats in Jakarta believe at least part of the Indonesian army, as well as hard-liners in the cabinet, are out to provoke unrest and prevent a vote.

Mr Gusmao had gained international respect with his efforts to secure peace but his call to arms met with disapproval abroad yesterday.

"Violence begets violence and East Timor will have a very unhappy future if it follows the path of violence," said Alexander Downer, Australia's foreign minister. "It's going to be a very difficult situation to control."

Madeleine Albright, the US secretary of state, had urged the military to disarm the paramilitary and reduce troops when she visited Jakarta last month. But her spokesman on Monday called Mr Gusmao's statement "a dangerous and troubling development" and called on him to reconsider.

"It will only inflame the situation," added Dewi Fortuna Anwar, foreign policy adviser to B.J. Habibie, Indonesia's president.

In Dili, the capital of East Timor, both supporters and antagonists of Mr Gusmao's rebels predicted his call to arms would be heard. "If you want to sell war, we'll buy it," responded Basilio diaz Arauzuo, leader of a group of Timorese who favour staying within Indonesia. "We'll see who is stronger."

Some diplomats suggested Mr Gusmao had made his call to arms not just out of his expressed frustration with the lack of international condemnation of the recent killings in East Timor, but more in reaction to growing impatience among Timorese students and guerrillas with his efforts to secure a peaceful transition.

"He needs to maintain his legitimacy in East Timor," one diplomat said. "He may be making this decision against his better judgment."

Diplomats said international pressure on Indonesia to halt violence in East Timor had been strong but hampered by a realisation that the cabinet in Jakarta was deeply divided over the issue, with various factions using East Timor in their power struggle. Jakarta's sudden decision to offer independence if a proposal for autonomy were rejected was an initiative of Mr Habibie.

Ali Alatas, foreign minister, has pushed an autonomy proposal but found it torpedoed by hardliners, forcing him to delay talks at the United Nations with Portugal, which still claims East Timor as its colony. Senior officials are due to meet in New York next week to prepare a ministerial meeting for late April, but few expect Jakarta to have completed its autonomy package by then.

"It's not a practical problem on the ground," one diplomat said. "It's a problem here in Jakarta. They're backtracking."

CONTRACTS & TENDERS

GOVERNO DA BAHIA

FEDERATIVE REPUBLIC OF BRAZIL
STATE OF BAHIA

DEPARTMENT OF ADMINISTRATION – SAEB

CENTRAL TENDER COMMITTEE – CCL
CALL FOR TENDERS – INTERNATIONAL COMPETITION

Type	No.	Objective	Date	Time	Place	Equity Capital
Competitive Bidding	5	Fire Fighting Vehicle	30 April 99	3:00 p.m.	SAEB	R$50.000,00

All interested parties may obtain further information and/or the Tender Document and its attachments Estado da Bahia – Comissão Central de Licitação – CCL, at the following address: 2° avenida, 200, Plataforma III, Térreo – SAF – Serviço de Atendimento ao Fornecedor-Centro Administrativo da Bahia-CAB, Salvador, Bahia, Brazil. Tel: (5571) 371-0119, from 25 March 99 to 30 April 99 from 9:30 a.m. to 5:30 p.m. following payment of R$30,00 (thirty Brazilian reals) by check, payable to Fundo Rotativo de Material, or through the Internet at *www.bahia.ba.gov.br/saeb/saf.htm*
Salvador, 25 March 1999/Orlando Gomes da Silva/Chairman CCL

SECRETARIA DA ADMINISTRAÇÃO DO ESTADO DA BAHIA

SECRETARIA DA ADMINISTRAÇÃO DO ESTADO DA BAHIA

Japan's vehicle sales lowest for 12 years

By Alexandra Harney in Tokyo

The collapse in consumer demand amid Japan's longest postwar recession sent new vehicle sales plunging to their lowest levels in 12 years last financial year, according to figures released yesterday by the Japan Automobile Manufacturers Association (Jama).

In the 12 months that ended in March, sales of new vehicles, including minicars, trucks and buses, tumbled 6.5 per cent to 5.87m units. It was the first time vehicle sales had fallen below 6m since 1986.

Consumer anxiety about the future, fuelled by corporate restructuring and the crisis in the banking system, were the biggest factors behind the decline, Jama said. "In a word, it was the recession," the association said.

Trucks and buses were the worst hit, reflecting the sharp downturn in capital spending by companies. Truck sales plunged by 17.4 per cent to 1.7m units.

Bus sales slowed 8.1 per cent compared with the year before, falling to 13,971 units.

However, mini-vehicle sales jumped 8.2 per cent to 1.65m. Mini-vehicles are cars and trucks with engine displacement of 660cc or less.

Separately, the Japan Automobile Importers Association reported that imported vehicle sales plummeted 14.3 per cent to 275,546 units, the slowest year on record since 1994.

In the financial year that began in April, Jama expects sales to improve to 6.04m units as the government's fiscal stimulus package and inventory adjustment at manufacturers feeds through to consumer sentiment.

However, Jama warned that car sales were not likely to recover to their peak of nearly 8m vehicles in 1990.

Is Japan recovering? Page 15

CORRECTION

IMF and Japan

The International Monetary Fund expects Japanese gross domestic product to contract this year by more than the 0.5 per cent it forecast last autumn, but not necessarily by more than the 2.8 per cent by which the country's GDP declined in 1998. In reporting remarks last week by Stanley Fischer, the IMF's first deputy managing director, the Financial Times incorrectly suggested he was expecting the fall this year to be even greater than last year's actual figure.

Philippines inflation falls

By Tony Tassell in Manila

Much lower-than-expected inflation data for the Philippines for February released yesterday have signalled further cuts in interest rates and highlighted the continuing slowdown of the country's economy, according to economists.

The year-on-year inflation rate fell to 8.7 per cent in February from 9.9 per cent in January.

Paul Mutuc, head of research at DBS Securities, said that the February inflation rate had been "surprisingly" low and was likely to lead to cuts in interest rates.

He said the current benchmark 90 Treasury Bill rate of 11.4 per cent was likely to average out at about 11 per cent over the year.

Analysts added that the lower inflation rate may also lead to cuts in bank reserve requirements as the central bank attempts to stimulate bank lending.

The monetary board of the central bank is meeting today to consider monetary policy.

هكذا من الأصل

INTERNATIONAL

CAMP ZEIST SUSPECTS APPEAR BEFORE SCOTTISH SHERIFF IN THE NETHERLANDS

Libyans charged with Pan Am Lockerbie murder

By Gordon Cramb in Amsterdam

The two Libyans suspected of causing the 1988 Pan Am air crash at Lockerbie in Scotland were yesterday charged with murder, conspiracy to murder and breaches of UK aviation law. Their appearance before a Scottish sheriff in the Netherlands marked the end of a protracted international effort to bring them to trial.

In the five-minute hearing at Camp Zeist, a military base east of Utrecht, the men were not asked to enter a plea to the charges. The next stage will be their committal for trial, which has to take place by Thursday next week. Under an Anglo-Dutch treaty, 100 acres (40 hectares) at Zeist are Scottish soil: during the procedure which could take well over a year.

The Libyan government of Muammer Gadaffi handed the suspects over to the United Nations in Tripoli, the capital, on Monday. Libya had resisted western insistence that any trial take place in Britain or the US, whose nationals were in the majority among the 270 who died.

The suspects' departure brought the immediate suspension of UN sanctions against Libya, imposed in 1992 and tightened the following year. Libyan Arab Airlines, the national flag carrier grounded since then by a ban on air traffic, said it would have a schedule of international flights ready as soon as today.

Re-equipping the airline is among the contracts being eyed by western companies, with British Aerospace known to have been in discussions. Oil installations, ports and other infrastructure also need to be upgraded, in an operation in which Col Gadaffi has promised priority to Italian companies.

Lamberto Dini, Italian foreign minister, arrived in Tripoli yesterday promising support for Libya's accession to the Euro-Mediterranean Forum, aimed at promoting north-south political and economic co-operation. The Lockerbie suspects were flown out on an aircraft loaned to the UN by Italy, which as the former colonial power in Libya had been among countries seeking a solution to the trial impasse.

Saudi Arabia and South Africa also helped persuade Col Gadaffi to accept a trial in the Netherlands for the two, who are alleged to have been officers in his intelligence service. If convicted of planting the suitcase bomb, Abdel Basset Ali Mohamed al-Megrahi and Lamen Khalifa Fhimah face life sentences which they would serve in Scotland under UN supervision.

Hans Corell, the chief UN legal counsel, who escorted the men to Dutch custody, said on Monday that the Libyan lawyers with whom he had negotiated had expressed no doubts about the independence of the Scottish court which will hear the case. "On the contrary, it was referred to with respect."

Three judges will adjudicate, in the first Scottish murder case in modern times without a jury. The committal proceedings will, like yesterday's initial appearance, be presided over in closed session by sheriff Graham Cox. The trial will be open to the public. "It will be a fairly big building, though probably not big enough to cope with demand," the Scottish Office said.

Ugandan ministers sacked

By Mark Turner in Nairobi

President Yoweri Museveni of Uganda has reshuffled his cabinet in what is being seen as an attempt to fend off accusations of graft and mismanagement in the government.

Specioza Wandira Kazibwe, the vice president, who faced a parliamentary censure motion, lost her agriculture portfolio, although she remains vice president.

The prime minister, Kintu Musoke, who had asked to retire, was replaced by Apollo Nsibambi, the former education minister, and Sam Kuteesa, the minister of state for planning and investment, was fired. Richard Kaijuka, energy minister, and third deputy prime minister Paul Etyang were also removed.

Donors did not expect the move to affect government policy, but said that Uganda should press ahead with reforms. The IMF recently delayed disbursing a second $23m tranche of a three-year enhanced structural adjustment facility, after the government missed a number of performance criteria "by a small margin". Donors have expressed concerns that defence spending has not been kept within agreed limits. An IMF mission is expected in May to assess recent performance, and will return in July or August.

ALGERIA'S ELECTION FORMER PREMIER WARNS OF STAY-AT-HOME 'TRAP'

High turnout 'will ensure free poll'

By Roula Khalaf in London

Mouloud Hamrouche, a leading contender in Algeria's presidential election, is stepping up pressure for a free election by calling for a big turnout and telling voters that this would ensure the poll's transparency.

Mr Hamrouche, a former prime minister who led the reformist wing of the National Liberation Front (FLN), the former ruling party, has been touring the country to drum up support for his candidacy as much as to convince sceptical Algerians to show up at polling stations.

"You are not clear whether it is worth your while to vote and your confusion is getting worse by the day as you hear some say that the election is a foregone conclusion," he told Algerians in a recent radio broadcast. "But these (people's) aim is to discourage you from voting and by not voting you will fall into the trap they laid for you."

Outgoing President Liamine Zeroual and the Algerian army have pledged the election will be free. The interior ministry has promised additional safeguards against rigging. But candidates from the opposition have raised concerns that a large section of the regime was backing Abdelaziz Bouteflika, the former foreign minister, and fear the administration will not remain impartial.

Mr Hamrouche's aides said he believes a high turnout could change the calculations that may have been made by some circles of power and thereby force a fair election. The more people voted, they said, the less room there would be for possible manipulation of the results.

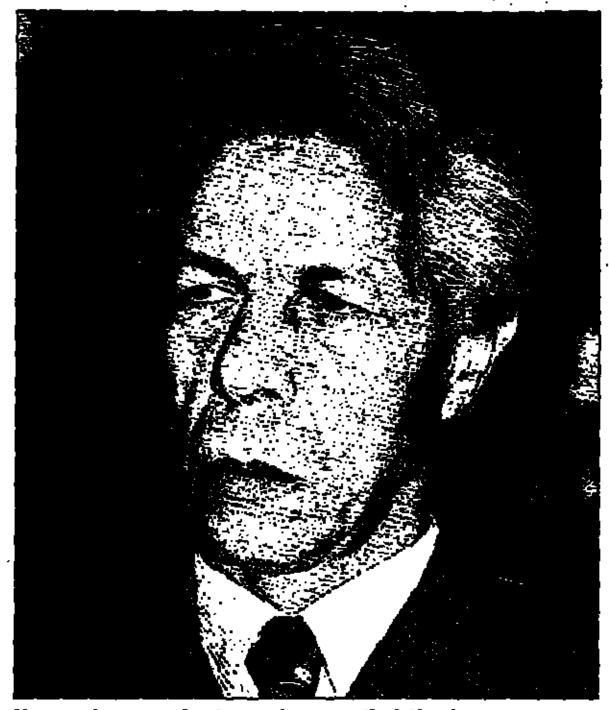
Mr Hamrouche is running as an independent candidate in a field of seven. There are no credible opinion polls in Algeria but analysts say the first round will be fought between four candidates: Mr Bouteflika, Mr Hamrouche, Ahmed Taleb Ibrahimi, a former foreign minister likely to win the bulk of the Islamist vote, and Hocine Ait Ahmed, leader of the Socialist Forces Front (FFS), a strong critic of the regime.

As prime minister from 1989 to 1991, Mr Hamrouche introduced Algeria's first economic and political reforms. Since the 1992 cancellation of elections in which the Islamic Salvation Front (FIS) was about to win a majority of seats in parliament, he has often criticised the regime and its handling of the Algerian crisis.

But having kept to himself in recent years, Mr Hamrouche's return on the political scene is part of a strategy that looks further ahead than winning the election, said his associates. They say he is using his campaign to engage Algerians more in the country's politics and lay the grounds for the emergence of a strong opposition movement.

His campaign's central message is the pursuit of economic and political reforms, which he says must go hand in hand. Only through a real democracy and transparent decision-making could Algeria come out of its current crisis.

He criticises the International Monetary Fund on the grounds that it contributed to wasting Algeria's resources, since reforms it has promoted since 1994 have failed to promote levels of investment needed or generate growth that could absorb the rising number of unemployed.

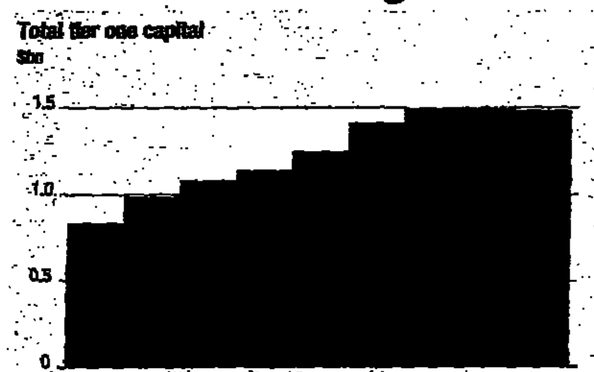


Hamrouche: campaign to convince sceptical Algerians to vote

Basle rules on banks' capital adequacy show their age

With one deadline already missed, there is pressure to agree on overhauling the system for providing a cushion against losses. **George Graham** reports

Total tier one capital
$bn



Source: The Banker

Banking regulators have not given up hope of reaching agreement on an overhaul of the Basle capital adequacy rules but, after failing to meet the deadline they had set for this week, they are wary about setting up another target they might not hit.

"We are going to keep working on it, but we don't want to put a word like 'soon' on it," said one official involved in the discussions.

For commercial banks waiting anxiously for the new Basle rules, however, indefinite delay is not an option.

"Given the way industry expectations had been allowed to rise, the delay is frustrating but not, we believe, fatal," said Richard Quinn of the British Bankers' Association.

The heart of the Basle capital rules, established in 1988 by a committee of banking supervisors working under the aegis of the Bank for International Settlements in Basle, is a formula for working out how much capital each bank needs to cushion it against unexpected losses.

Banks must hold total capital equivalent to at least 8 per cent of their assets, with half of this cushion in the form of "Tier 1" capital such as pure equity.

Assets are weighted according to risk, with a 100 per cent weighting for most loans, but only 50 per cent for residential mortgages and 20 per cent for short-term interbank credits.

The original drafters wanted to increase the overall amount of capital held in the banking system, which had been depleted by the developing country debt problems of the 1980s, and have had some success.

The total Tier 1 capital held by the world's 1,000 largest banks has climbed, according to statistics compiled by The Banker magazine, from $839bn in 1990, when the rules first came into effect, to $1,488bn last year.

But the rules are showing their age. The cushion is now starting to get thinner, as banks learn to adjust their behaviour to fit the formula, sometimes with perverse consequences.

> **'The asset side of Basle is now in tatters'**

They have securitised corporate loans, for example, which carry a higher capital charge than can be justified by their interest rates, and concentrated on loans with a maturity of 364 days and less, simply because they carried a lower capital charge.

"The asset side of Basle is now in tatters," complained one banker.

The Basle committee's response includes a re-working of the capital formula.

McDonough: sees the framework as resting on three pillars

Banks know already that they will be disappointed in their hopes of being allowed to use a sophisticated form of credit risk modelling, similar to that used for measuring market risk: supervisors are simply not yet convinced that the mathematics is robust enough for their purposes.

But the argument is still raging on whether loans will be kept in simple categories, as today, or whether weightings will be tied to credit ratings, either from internal bank assessments or from external rating agencies.

The case for internal ratings has brought together a strange alliance of some of the most sophisticated international banks, which see internal ratings as a step towards full-scale credit risk modelling, and some less advanced European banks, which fear that the use of external ratings would put them at a competitive disadvantage to their US counterparts, because fewer of their corporate customers have such ratings.

For the time being, the sticking point is Germany's insistence that commercial mortgages should carry just a 50 per cent risk weighting, like residential mortgages.

But William McDonough, president of the New York Federal Reserve and chairman of the Basle committee, says the capital formula itself is just one of three pillars on which the new framework will be built. The committee also hopes to strengthen market discipline, through enhanced disclosure requirements, but also, more controversially, to introduce more qualitative judgment into the supervisory process.

This would change little in the UK, where supervisors already set individual minimum capital ratios for each bank, based on the quality of their management and controls and on the riskiness of their business.

But it has provoked concern in Germany, where some argue that it would breach the national constitution by allowing regulators to discriminate between institutions.

"There is a danger that this kind of individual supervision could lead to competitive distortions," the German banking association said.

NOTICE OF A MEETING OF THE HOLDERS OF
P.T. ASTRA INTERNATIONAL TBK (the Issuer)
U.S. $125,000,000 6¾ per cent.
Convertible Bonds due 2006

NOTICE IS HEREBY GIVEN that a Meeting of the holders (the *Bondholders*) of the above-mentioned bonds (the *Bonds*) constituted by a trust deed dated 2nd, April 1991 (the *Trust Deed*) and made between the Issuer and Bankers Trustee Company Limited (the *Trustee*) will be held at at 2.00 p.m. (Singapore time) on 29th, April 1999, at the Hotel Intercontinental, Singapore, 80 Middle Road, Bugis Junction, Singapore 188966 for the purpose of considering and, if thought fit, passing the following Extraordinary Resolutions:

EXTRAORDINARY RESOLUTIONS

THAT this meeting of the holders of the U.S.$125,000,000 6¾ per cent. Convertible bonds due 2006 (the Bonds) of P.T. Astra International Tbk (the Issuer), constituted by a Trust Deed dated 2nd, April 1991 (the Trust Deed) and made between the Issuer and Bankers Trustee Company Limited (the *Trustee*), hereby:

RESOLUTION 1

"(i) assents to the exchange of the Bonds for new bonds issued as part of the three Series of new bonds denominated in United States dollars (the *New Dollar Bonds*) all as more particularly described in the document entitled Restructuring Framework for P.T. Astra International Tbk produced to this meeting and signed by the Chairman for the purposes of identification (the *Restructuring Framework*);

(ii) requests and authorises the Trustee (or its delegate(s)) to enter into a supplemental trust deed to the Trust Deed (the *Supplemental Trust Deed*) in substantially the form produced to the meeting and signed by the Chairman for the purposes of identification providing that, on the closing date of the restructuring contemplated by the Restructuring Framework (the *Closing Date*), the Issuer shall have no further liability to make any payments to Bondholders in connection with the Bonds but that Bondholders shall, subject to compliance with the procedures for exchange summarised in the Restructuring Framework and more particularly set out in the explanatory statement produced to this meeting and signed by the Chairman for the purposes of identification (the *Explanatory Statement*), be entitled to receive the New Dollar Bonds and, in the case of the initial holders of Series III, the share subscription warrants described in the Restructuring Framework provided always that any Bondholder who is unable to provide the necessary certifications in the exchange letter of transmittal or who fails to return the exchange letter of transmittal within 45 days of the Closing Date to the exchange agent (the *Exchange Agent*) appointed by the Issuer for this purpose and notified to Bondholders prior to the Closing Date will be entitled only to the net cash proceeds from a sale by the Exchange Agent of the New Dollar Bonds and warrants to which such Bondholders would have otherwise been entitled upon delivery of a completed exchange letter of transmittal with the required certifications;

(iii) authorises L.D.C. Trustees Limited (the *New Bonds Trustee*) to act as the trustee for the New Dollar Bonds and to enter into (i) a new English law governed trust deed constituting the New Dollar Bonds (the *New Trust Deed*) in substantially the form produced to the meeting and signed by the Chairman for the purposes of identification; (ii) an English law governed Security Trust Deed and Common Terms Agreement as referred to in the Restructuring Framework (the *Security Trust Deed and Common Terms Agreement*) and (iii) any other documentation ancillary thereto which is, in the sole discretion of the New Bonds Trustee (or its delegate(s)), necessary or desirable in order to protect the interests of holders of the New Dollar Bonds; and

(iv) acknowledges and agrees that neither the Trustee (and its delegate(s)) nor the New Bonds Trustee shall be under any liability to the Bondholders by reason of it acting in accordance with the requests in (ii) and (iii) above, it being recognised and understood that neither the Trustee nor the New Bond Trustee will not be responsible for negotiating the provisions of the Security Trust Deed and Common Terms Agreement or the New Trust Deed or the terms and conditions of the New Dollar Bonds save insofar as those provisions and/or terms and conditions directly affect its interests.

PROVIDED THAT paragraphs (i), (ii) and (iii) of this Resolution shall become effective as soon as, but only if:

(a) the Security Trust Deed and Common Terms Agreement has been executed by the Issuer, Astra Overseas Finance B.V., the security trustee for the Restructured Debt (whose identity will be notified to Bondholders prior to the Closing Date), the New Bonds Trustee, the principal paying agent for the Restructured Debt (as defined in the Restructuring Framework) and the facility agent for the bank creditors party to the Consolidated Facility Agreement (as defined in the Restructuring Framework);

(b) the number of creditors of the Issuer and Astra Overseas Finance B.V. (other than the Bondholders and the holders of Other Bonds (as defined below)) which have become parties to the Consolidated Facility Agreement is sufficient to permit the Issuer to proceed to implement the Restructuring Framework on a consensual basis and not by means of a court sanctioned composition plan;

(c) the holders of the Other Bonds have passed resolutions which, under their respective terms and conditions, upon becoming effective have the same binding effect on all holders of such Other Bonds as this Resolution has on holders of the Bonds; and

(d) the conditions precedent to the Closing Date specified in the Security Trust Deed and Common Terms Agreement (other than the effectiveness of this Resolution or any other similar resolutions by holders of the Other Bonds that are conditional upon satisfaction of those conditions precedent) are satisfied or waived, with the consent of the security trustee (or its delegate(s)).

PROVIDED FURTHER THAT paragraphs (i), (ii) and (iii) of this Resolution will take effect only if the conditions in (a), (b), (c) and (d) above are satisfied or waived by no later than 365 days after the date on which this Resolution is passed."

Resolution 1 (iv) will take effect immediately.

RESOLUTION 2

"(i) requests and authorises the Trustee (or its delegate(s)) to, subject to their being indemnified to their satisfaction against any costs or liabilities involved, register the claims of the Bondholders and the Trustee in any debt composition plan that may be proposed by the Issuer, under the Bankruptcy Law of the Republic of Indonesia in order to implement the Restructuring Framework (the *Composition Plan*) and to vote in favour of the Composition Plan in circumstances where insufficient of creditors affected by the Restructuring Framework have either (a) agreed to be legally bound by the documentation implementing the Restructuring Framework (subject only to the conditions precedent in the Security Trust Deed and Common Terms Agreement) or (b), in the case of holders of (i) the U.S.$125,000,000 9.75 per cent. Notes due 2001 of the Issuer; (ii) U.S.$200,000,000 8.75 per cent. Guaranteed Bonds due 2003 issued by Astra Overseas Finance B.V. and unconditionally and irrevocably guaranteed by the Issuer and (iii) the Rupiah 400 billion bonds due 2002 of the Issuer (together the *Other Bonds*), have passed resolutions which under their respective terms and conditions, upon becoming effective have the same binding effect on all holders of such Other Bonds as the Extraordinary Resolutions have on holders of the Bonds; and

(ii) acknowledges and agrees that the Trustee (and its delegate(s)) shall not be under any liability to the Bondholders by reason of it acting in accordance with the requests in (i) above.

PROVIDED THAT the authority conferred on the Trustee (or its delegate(s)) in (i) above shall expire 365 days after the date on which this Resolution is passed."

Resolution 2 shall take effect when it is passed.

Bondholders should note that upon approval by (1) those creditors affected by the Composition Plan (the *Affected Creditors*) who represent a majority in number of Affected Creditors and two thirds by value of the Restructured Debt and (2) ratification by the Commercial Court of the Republic of Indonesia, the Composition Plan will, under Indonesian law bind all Affected Creditors, including the Bondholders.

This Meeting is convened by the Issuer.

AVAILABILITY OF DOCUMENTS

Copies of the Restructuring Framework, the current drafts of the Security Trust Deed and Common Terms Agreement, the New Trust Deed and the terms and conditions of the New Dollar Bonds and the paying agent agreement relating to the New Dollar Bonds may be inspected, and copies of the voting certificates and other documents referred to above may be obtained, by Bondholders from the specified office of any of the Paying Agents given below on or after 19th, April 1999 and (with the exception of the voting certificates) at the Meeting itself.

The Explanatory Statement which provides further information on the Restructuring Framework, the business and financial condition of the Issuer, the rationale for the Restructuring Framework, the procedures for exchange of interests in the Bonds for interests in the New Dollar Bonds and other matters relevant to the Extraordinary Resolutions will be released by the Issuer on or around 13th April 1999. Copies will be sent to the Trustee, the listing agent for the Bonds, the Registrar and Transfer Agent, the Principal Paying Agent and other paying agents, Euroclear and Cedelbank and will also be available upon request from the Issuer at the address specified below.

The attention of Bondholders is particularly drawn to the quorum required for the Meeting and for an adjourned meeting which is set out in paragraph 2 of *Voting and Quorum* below.

TRUSTEE

In accordance with its normal practice, the Trustee (who has not seen the Explanatory Statement) expresses no opinion on the merits of the proposed arrangements (which it was not involved in negotiating) but has authorised it to be stated that it has no objection to the Extraordinary Resolutions being submitted to the Bondholders for their consideration.

POWER OF ATTORNEY TO ACT FOR BONDHOLDERS

In addition to considering and, if thought fit, passing the above mentioned Extraordinary Resolutions, Bondholders are requested to consider appointing the Trustee (or its delegate(s)) as their attorney to represent them individually in registering their claims and voting in the Composition Plan if the Composition Plan is to be implemented at a time when the Extraordinary Resolutions set out in this notice have not been passed by Bondholders. It is possible that the Composition Plan could be passed without the Extraordinary Resolutions being passed if a majority in number of all Affected Creditors holding two thirds of the Restructured Debt so agree.

Those Bondholders who are prepared to co-operate by providing an appropriate power of attorney should contact Bankers Trustee Company Limited on fax: (44) 171 982 3372 directly to obtain further instructions on the procedures to be followed.

VOTING AND QUORUM

1. A Bondholder wishing to attend and vote at the Meeting in person must produce at the Meeting either his Bond(s), or, in the case of Bonds issued in bearer form (*Bearer Bonds*), a valid voting certificate or valid voting certificates issued by a Paying Agent relative to the Bearer Bond(s), in respect of which he wishes to vote.

A holder of Bearer Bonds not wishing to attend and vote at the Meeting in person may either deliver his Bearer Bond(s) or voting certificate(s) to the person whom he wishes to attend on his behalf or may require a Paying Agent to issue a block voting instruction instructing a Paying Agent to appoint a proxy to attend and vote at the Meeting in accordance with his instructions. Each block voting instruction shall be deposited with a Paying Agent not less than 24 hours before the time fixed for the meeting (or, if applicable, any adjournment of such Meeting). The proxy so appointed shall produce at such Meeting a notarially certified copy of each such block voting instruction and may also be required by the Trustee to provide satisfactory proof of its appointment.

Bearer Bonds may be deposited for the purpose of obtaining voting certificates or requiring a Paying Agent to issue a block voting instruction in respect of the Meeting at any time not later than 48 hours before the time fixed for holding the Meeting (or, if applicable, any adjournment of such Meeting) with any Paying Agent or (to the satisfaction of the Paying Agent) held to its order or under its control by Cedelbank or Morgan Guaranty Trust Company of New York, Brussels Office as Operator of the Euroclear System. Bonds so deposited or held will not be released until the earlier of the conclusion of the Meeting (or, if applicable, any adjournment of such Meeting) and either the surrender of the voting certificate(s) or, not less than 48 hours before the time for which the Meeting (or, if applicable any adjournment of such Meeting) is convened, the block voting instruction receipt(s) issued in respect thereof.

A holder of Bonds in registered form (*Registered Bonds*) may by an instrument in writing in the English language signed by that Bondholder or, in the case of a corporation, executed under its common seal or signed on its behalf by an attorney or a duly authorised officer of the corporation, appoint any person as his or its proxy to act on his or its behalf in connection with the Meeting. The form of proxy is available from the specified office of a Transfer Agent set out below and must be delivered to such office not later than 24 hours before the time fixed for the Meeting. Any holder of a Registered Bond which is a corporation may, by delivering to the specified office of Transfer Agent set out below not later than 24 hours before the time fixed for the Meeting a resolution of its directors or other governing body in the English language, authorise any person to act as its representative in connection with the Meeting.

QUORUM

2. The quorum required at the Meeting for the passing of the Extraordinary Resolutions set out above is two or more persons present holding Bonds or voting certificates or being proxies or representatives and holding or representing in the aggregate not less than three quarters of the principal amount of the Bonds for the time being outstanding. If, within 15 minutes from the time fixed for the Meeting a quorum for the passing of the Extraordinary Resolutions is not present at the Meeting, the Meeting will stand adjourned for such period (not being less than 14 days nor more than 42 days) and to such place as may be decided by the Chairman of the Meeting. At such adjourned meeting the quorum shall be two or more persons present in person holding Bonds or voting certificates or being proxies or representatives and holding or representing in the aggregate over one quarter in principal amount of the Bonds for the time being outstanding.

VOTING

3. Any question submitted to the Meeting will be decided on a show of hands unless a poll is duly demanded by the Chairman of the Meeting, the Issuer, the Trustee or by one or more persons present holding one or more Bonds or voting certificates or being proxies or representatives and holding or representing in the aggregate not less than 2 per cent. in principal amount of the Bonds then outstanding. On a show of hands every person who is present in person and produces a Bond or voting certificate or is a proxy or representative shall have one vote. On a poll every person who is so present shall have one vote in respect of each U.S.$5,000 so produced or represented by the voting certificate so produced or in respect of which he is a proxy or representative. In case of equality of votes, on both a show of hands and a poll, the Chairman shall have a casting vote in addition to the vote(s) (if any) which he may have as a Bondholder or as a holder of a voting certificate or as a proxy or representative.

4. To be passed, the Extraordinary Resolutions require a majority in favour consisting of not less than three quarters of the votes cast. If passed, the Extraordinary Resolution(s) will be binding upon all Bondholders, whether or not present at the Meeting, and upon all the holders of coupons relating to the Bonds and each of them shall be bound to give effect to it accordingly.

ISSUER
P.T. Astra International Tbk,
Wisma 46 – Kota BNI,
Jl. Jend. Sudirman kav. 1,
Jakarta 1220, Indonesia
Att: Astra Debt Restructuring Team
Phone: +6221 5714206/7 or +6221 5711555
Fax: +6221 5714233/2
email: tari@ai.astra.co.id or imic@ase.astra.co.id

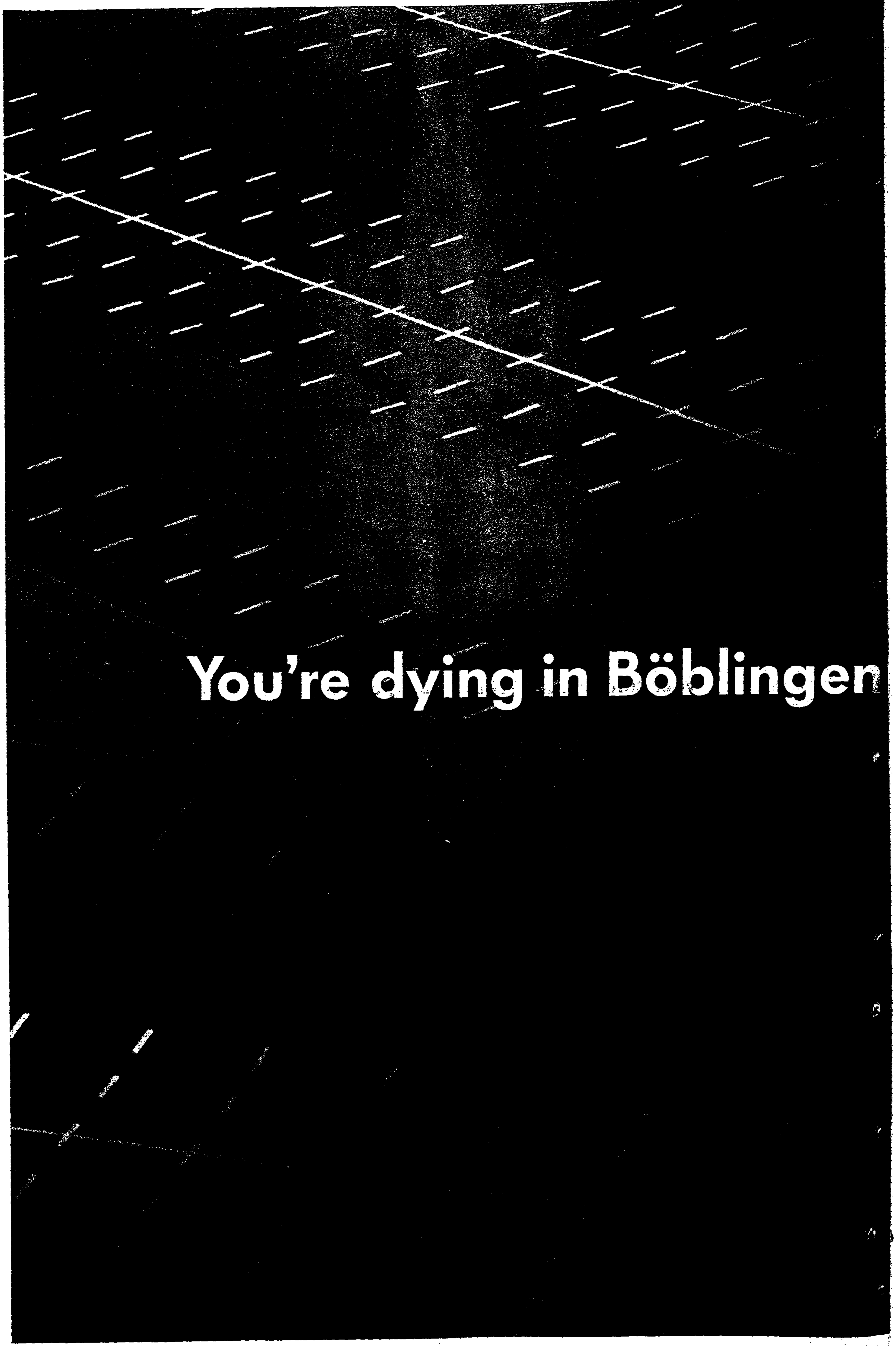
PRINCIPAL PAYING AGENT AND TRANSFER AGENT
Bankers Trust Company,
1 Appold Street
Broadgate,
London EC2A 2HE,
England
Att: Ian Tierney
Phone: +44 171 982 2771
Fax: +44 171 982 5782

PAYING AGENTS AND TRANSFER AGENTS
Bankers Trust Company,
Bankers Trust Luxembourg S.A.
and
Swiss Bank Corporation
c/o Bankers Trust Company
33 Old Broad Street
London EC2N 1HZ,
England

REGISTERED AND TRANSFER AGENT FOR REGISTERED BONDS
Bankers Trust Company
Four Albany Street
New York
New York 10015
U.S.A.

Dated 7th April 1999

THIS NOTICE IS IMPORTANT. IF BONDHOLDERS ARE IN ANY DOUBT AS TO THE ACTION THEY SHOULD TAKE THEY SHOULD CONSULT THEIR STOCKBROKER, LAWYER, ACCOUNTANT OR OTHER PROFESSIONAL ADVISER WITHOUT DELAY.



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WORLD TRADE

Clocks deadline threatens ships' navigational systems

By Charles Batchelor, Transport Correspondent

The navigational systems of older ships may fail at midnight on August 21 when satellite clocks are reset, the International Maritime Organisation warned yesterday.

The "clock" which controls the global positioning system used by ships masters to plot their course stops at midnight on the night of August 21-22 and restarts immediately from zero.

Just as some computers may not recognise dates in the next millennium, some of the older GPS receivers on ships may not recognise the date after August 21, said the IMO, the United Nations shipping agency.

GPS is a positioning system using satellites which was developed by the US Air Force. The atomic clocks in the satellites were set with a base date in January 1980 and run on 1,024-week cycles. On August 21 the clocks reset themselves to week 0.

Equipment supplied since 1994 is likely to be pre-programmed to deal with this problem but older receivers, navigation equipment and time-keeping equipment may experience problems when the week counter is reset. "It is not clear how serious these problems will be," the IMO warned.

The receiver may interpret the new week 0 as January 6 1980 and might then stop tracking any satellite or its systems might not perform accurately.

Manufacturers and shipping organisations warned that at worst a failure of navigational equipment could endanger lives or damage the financial health of the shipping company.

But in comments to the UK parliament's transport select committee last November, David Rowlands, a senior department of transport official, said affected receivers "would not generate false readings but would simply fail."

John Joyce, marine director at the International Chamber of Shipping, said shipowners were being advised to consult the manufacturers of their systems or acquire cheap handheld positioning devices to check their on-board systems.

Ships' captains were advised not to rely on any single system for obtaining their position. Many used traditional methods such as the sextant to establish their position and plot their course.

Shipowners should be alert to the GPS problem in advance of the changeover weekend because some ships may have receivers with clocks which are up to a week fast. Others may be up to a week slow, said Mr Joyce.

Even when the GPS deadline is passed, the shipping industry still has to cope with the year 2000 problem itself. In advice to the shipping industry, the IMO said that the chance of finding and fixing all year 2000 problems was "small". Even if shipowners modified their equipment others in the transport chain might affect them. Contingency plans should take account of the possibility of simultaneous failures of ships and port systems.

Bananas, beef... now peaches are highlighted in grocery 'war'

Gautam Malkani reports on another long-running trade dispute between the US and the European Union

Unlike others in the canned peach industry in northern California, Randy Fiorini has managed to avoid diverting land and tractors to other commodities such as wine grapes or almonds.

Many of his fellow peach growers, locked in a bitter trade dispute with the European Union for nearly 18 years, are no longer just trying to salvage their export market but are now fighting for shelf space in American supermarkets.

While the US has vigorously fought the EU over bananas and hormone-treated beef, the 700 Californian growers who make up most of the US canned peach industry are still engaged in the most protracted of transatlantic trade disputes. Despite this the conflict has a low profile in Washington – where people are only too happy to volunteer their woes.

It was not always this calm. "We came to the brink of retaliation two or three times over canned peaches," says Leonard Condon, a former US trade official who worked on the issue during the 1980s.

The US argues that EU subsidies to domestic peach canners are excessive, impairing negotiated trade practices and helping the Greek industry dominate the global market. It goes back to a successful 1981 challenge in the General Agreement on Tariffs and Trade, the World Trade Organisation's predecessor.

The dispute was theoretically resolved in a 1985 US-EU canned fruit accord – subsequently confirmed by the Uruguay Round of the Gatt – regulating the level of support. Since then, not only have both sides disagreed on whether these levels have been adhered to and whether money intended for growers is instead enjoyed by canners through whom it is funnelled, but the original dispute has fundamentally metamorphosised.

It now includes accusations of fraud and the abuse of the system for disposing of excess production.

Mr Condon suggests that after so long there may be an element of trade dispute fatigue. "Their resources are limited in terms of how much noise they can make, how much they can afford to fly back and forth to Washington or Brussels and get their own legal adviser in Washington.

Their political clout – essential for getting an issue on the frontline – was never that large in the first place. Mr Fiorini, who chairs the California Cling Peach Growers Advisory Board, agrees that compared with beef, theirs is very localised production with strong support concentrated in Californian members of Congress. And while their plight was last year mentioned in resolutions passed by both the Senate and the House of Representatives, this has not sold more peaches.

Other reasons why canned peaches lie in the shadow of bananas and beef are intrinsic to the complaint against the EU itself. "Maybe ours is a lot more complicated," admits Mr Fiorini.

Indeed, the banana and beef disputes are couched in terms of service and distribution agreements and health, thereby avoiding any entanglement in the delicately balanced system of EU agricultural support.

But others argue their case is also weaker. Tassos Haniotis, the EU's agriculture councillor in Washington, claims the reason the dispute has dragged on is because there is no concrete case. According to his interpretation of the accord, "subsidy" is a misnomer. It is instead a "refund" – the questionable distinction being whether or not it exceeds the difference between the average world price and the domestic support price for growers. "There is nothing in the current rules that says that these particular type of refund are not allowed... Had this been a subsidy we would have been challenged in the WTO," says Mr Haniotis.

While he argues that in 1997 EU reforms shifted more support from canners directly to growers and capped the money available for disposal of surpluses, he acknowledges that measures have had to be taken to combat fraud – which itself is hardly unique to canned peaches. "Fraud is a violation of a system, it's not an indication that a system is wrong," he says.

He also highlights other factors which hamper US competitiveness such as Californian competition for water, a strong dollar, and overcapacity in the canned fruit industry.

Indeed, while the US counts the support of Chile, Argentina, South Africa and Australia, much has changed since the original Section 301 filing and favourable Gatt ruling. The USTR – which is currently considering the EU's position submitted last month in informal talks – says it is still pursuing negotiated solutions before considering referral to a dispute panel of the WTO. Mr Fiorini says he is grateful that the USTR has pursued bananas and beef hormones, "as much as we'd like it to be peaches".

Nevertheless, while he insists it is simply a case of waiting their turn, he also admits the prospect of taking the conflict to the frontline of the WTO now also depends on the fortunes of the more prominent groceries. "We would love to go to the WTO but we don't know exactly what the outcome would be and until beef and bananas successfully make their way through and we find the results are meaningful we are just standing by."

An American peach farmer checks his crop. US exports of canned peaches have fallen in recent years

Canned peaches - world sales
Average annual exports

('000 cases)	US	Greece	Chile	Other	Total
1970-73	2,955	1,431	130	8,518	13,034
1980-83	1,843	5,195	226	6,957	14,221
1990-93	943	14,309	1,042	6,471	22,765

Source: Moolton

Pick-up in sales of lift trucks

By Peter Marsh in London

Sales of lift trucks in Europe rose last year by 14 per cent, higher than might have been expected from the relatively weak state of the continent's economy. The growth is related to efforts in much of manufacturing and retailing to move goods as rapidly as possible through the distribution chain and cut down on inventory bills.

According to Jungheinrich of Germany, Europe's second biggest lift truck maker, 206,000 lift trucks were sold in Europe last year, after 180,000 in 1997. The growth followed a 16 per cent year-on-year rise in sales of the machines in 1997, compared with the 155,000 sold in 1996.

Hans-Peter Schmohl, Jungheinrich's chairman, said the strong demand was linked to the increasing requirements for companies to shift products "with the maximum flexibility and the lowest costs" from their warehouses to customers' premises. Lift trucks – annual sales of which in Europe are valued at about $3bn – form an essential part of this process.

According to Jungheinrich's figures, which include some parts of eastern Europe as well as the main west European countries, roughly half the lift trucks sold last year in the continent were specialist vehicles for moving goods in warehouses, while the rest were more general purpose "counterbalance" trucks that mainly see service in goods yards and on factory floors.

The rapid growth in use of the machines in the past two years has confounded pessimists in the industry who thought that the muted economic growth across Europe might curb investment in this type of equipment. However it appears that the shift to "just in time" deliveries and the consequent need for relatively low-cost handling systems has given a spur to the main lift-truck companies operating in Europe. The biggest of these is Linde, also of Germany, with an estimated 38 per cent of the market, while Jungheinrich is thought to have accounted for just under a quarter of last year's total sales of the machines in Europe.

Other big companies selling lift trucks in the continent include Nacco of the US and Toyota of Japan.

According to Mr Schmohl, growth in sales of the machines is likely to fall this year, to only about 2 per cent in units, with the market becoming more competitive. Industry specialists say that after such rapid growth since 1996, customers for lift trucks are likely to take a breather. Also, signs of a slowing economy in Germany – which buys one in every four lift trucks sold in the continent – are likely to peg back sales in this country after two years of strong growth.

AUCTION NOTICE

UK GOVERNMENT EURO TREASURY BILLS AND BANK OF ENGLAND EURO BILLS

For auction on 13 April 1999

1. The Bank of England announces the issue by Her Majesty's Treasury of €700 million nominal of UK Government Euro Treasury Bills and the issue by the Bank of England of €300 million nominal of Bank of England Euro Bills, for auction on a bid-yield basis on Tuesday, 13 April 1999. An additional €50 million nominal of Bank of England Euro Bills will be allotted directly to the Bank of England.

2. The Bills to be issued by auction will be dated 15 April 1999 and will be in the following maturities:

€200 million of UK Government Euro Treasury Bills for maturity on 13 May 1999,

€500 million of UK Government Euro Treasury Bills for maturity on 15 July 1999 and

€300 million of Bank of England Euro Bills for maturity on 14 October 1999.

3. The auction will be open to anyone who wishes to apply. All applications must be made on the printed application forms available on request from the Bank of England or, in the case of the market makers listed in the UK Government Euro Treasury Bill Information Memorandum (as supplemented) and the Bank of England Euro Bill Information Memorandum, by telephone. Completed application forms must be lodged, by hand, at the Bank of England, Customer Settlement Services, Threadneedle Street, London not later than 11.00 a.m., London time, on Tuesday, 13 April 1999. Payment for Bills allotted will be due on Thursday, 15 April 1999.

4. Each application at each yield for each maturity must be made on a separate application form for a minimum of €500,000 nominal. Applications above this minimum must be in multiples of €100,000 nominal.

5. Applications must be made on a yield basis (calculated on the basis of the actual number of days to maturity and a year of 360 days) rounded to three decimal places. Each application form must state the maturity date of the Bills for which application is made, the yield bid and the amount applied for.

6. Notification will be despatched on the day of the auction to applicants whose applications have been accepted in whole or in part. For applicants who have requested credit of Bills in global form to their account with Euroclear or Cedelbank, Bills will be credited in the relevant systems against payment. Definitive UK Government Euro Treasury Bills will be available in amounts of €10,000, €100,000, €1,000,000 and €10,000,000 nominal. Bank of England Euro Bills will not be available in definitive form. For applicants who have requested definitive UK Government Euro Treasury Bills, Bills will be available for collection at Customer Settlement Services, Bank of England after 1.30 p.m. on Thursday, 15 April 1999 provided cleared funds have been credited to the Bank of England's Euro Treasury Bills Account No. 59005516 with Lloyds Bank Plc, Bank Relations, St George's House, PO Box 787, 6-8 Eastcheap, London EC3M 1LL.

7. Her Majesty's Treasury and the Bank of England reserve the right to reject any or part of any application

8. The arrangements for the auction are set out in more detail in the Information Memorandum on the UK Government Euro Treasury Bill programme issued by the Bank of England on behalf of Her Majesty's Treasury on 7 July 1998, in supplements to the UK Government Euro Treasury Bill Information Memorandum, and in the Information Memorandum on the Bank of England Euro Bill programme issued by the Bank of England on 6 April 1999. All applications will be subject to the provisions of the Information Memoranda (as supplemented) and to the provisions of this notice.

9. The €50 million of Bank of England Euro Bills to be allotted directly to the Bank of England will be for maturity on 14 October 1999. These Bills may be made available through sale and repurchase transactions to market makers in order to facilitate settlement.

10. Copies of the UK Government Euro Treasury Bill Information Memorandum (and supplements to it) and Bank of England Euro Bill Information Memorandum may be obtained from the Manager, External Debt, Foreign Exchange Division at the Bank of England (telephone number 0171 601 5982). UK Government Euro Treasury Bills are issued under the Treasury Bills Act 1877, the National Loans Act 1968 and the Treasury Bills Regulations 1968 as amended.

Bank of England
6 April 1999

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PARLIAMENTARY ELECTIONS NATIONALISTS PROPOSE $190M PACKAGE TO WIN OVER THOSE ALIENATED BY 'TARTAN TAX'

Business pledge opens Scots campaign

By Brian Groom, Andrew Parker and James Buxton in Edinburgh

The Scottish National party will try to win over business people – many of whom have been alienated by its "tartan tax" policy – by unveiling proposals this week for a £117.75m ($190m) package over three years to help small businesses.

But Donald Dewar, the chief minister for Scotland in the UK Labour government, will underline Labour's business-friendly credentials today when he announces an inward investment by JP Morgan, the US bank, creating 300 jobs for software engineers near Glasgow.

The battle over policies for investment is becoming a key issue in the May 6 election for the Scottish parliament. Formal campaigning began yesterday with Labour warning that a vote for the SNP would lead to divorce from the UK, higher taxes and fewer jobs.

A Labour official said: "JP Morgan certainly sign up to the fact Scotland is part of the UK and part of Europe. As long as it remains like that we will remain a key inward investment prospect."

The SNP was criticised by business leaders last month when it unveiled plans to maintain the basic rate of income tax at 23 per cent next year when it is cut to 22 per cent elsewhere in the UK. There was particular concern about unincorporated businesses, largely sole traders or partnerships, which pay income tax rather than corporation tax.

The party will announce the package as part of its manifesto tomorrow About £30m a year would go towards reducing the business rates burden, at least half of it to cut rates for the 50,000 smallest businesses by £300 a year. It also proposes £9m over three years for rural businesses hit by higher fuel costs, £15m for a business innovation fund, and £3.75m to ease the administrative costs of tax and national insurance.

The Federation of Small Businesses last night welcomed the plan, even though it fell short of the £50m a year it was seeking. The cash would come from money saved from the UK government's budget for Scotland.

Alex Salmond, the SNP leader, launched his campaign yesterday insisting that the 1% on tax to fund extra spending on health, housing and education would be the "defining issue" of the campaign. He played down the party's plan for a referendum on independence, putting it last on a postcard containing 10 campaign pledges. Mr Dewar accused the SNP of "trying to hide its central purpose". Jim Wallace, the Liberal Democrat leader, said his party was prepared to put 1p on tax to fund higher education spending, but it might not be necessary if "some slack" could be found in the Scottish budget.

Optimism rises in many companies

By Christopher Adams, Economics Staff

Further evidence has emerged of a rebound in UK business confidence, easing fears that the economy will suffer a severe downturn.

In one of the most upbeat economic surveys to be published in recent weeks, the Confederation of British Industry, the principal UK employers' organisation, reported that optimism among companies operating in the consumer, business and professional service sectors has recovered strongly.

The quarterly survey, released yesterday, showed a big jump in confidence between November and March, with almost 40 per cent of firms in the hotels, catering and travel industries expecting conditions to improve in coming months.

Accountants, lawyers and IT specialists were also upbeat about their immediate prospects, though the rebound in business services was not as pronounced as in the consumer sector. The recovery follows successive interest rate cuts and reflects continuing growth in the value of business over three months. Employment has also grown strongly.

Post Office arms itself for global market battle

State-owned organisation to escape years of commercial restriction, **Alan Pike** writes

The Post Office will this month form an international division to do battle with global competitors after "seven wasted years". That is how John Roberts, its chief executive, describes the period – most of the 1990s – in which the management of the state-owned Post Office pleaded with ministers for more commercial freedom.

Post Office managers – hampered by public sector investment restrictions and a requirement to return most profits to the government – feel they have been reduced to a spectator role in the rapid restructuring of European post and distribution markets.

German Parcel, Germany's third largest private carrier that in January became the UK Post Office's first big overseas acquisition, was formed with a single van just 10 years ago. Now it handles nearly 100m items a year and has annual sales of £250m ($402.5m). Its technical facilities are the envy of its new owner.

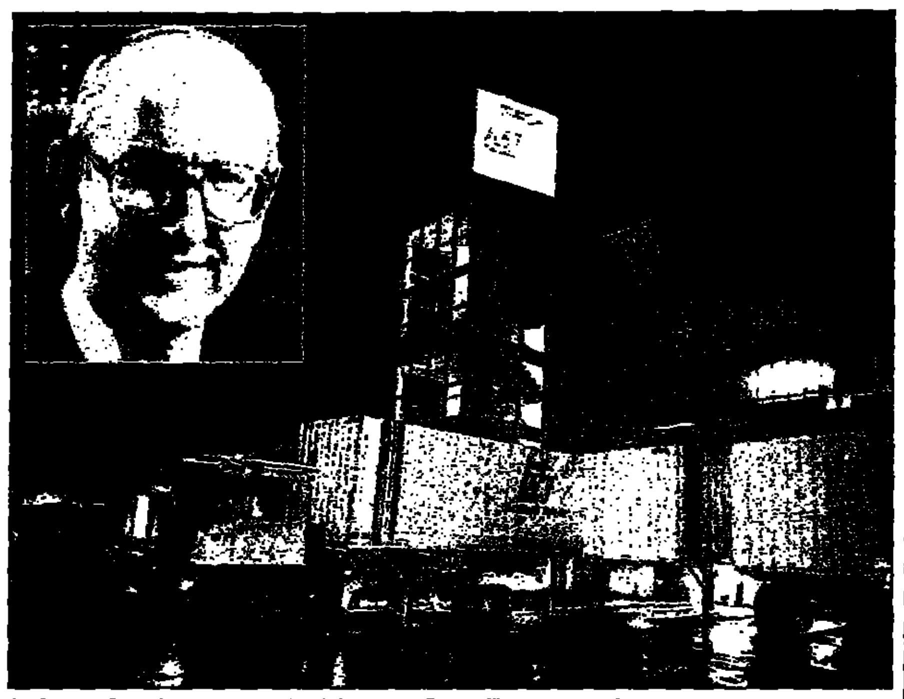
While German Parcel was growing, says Mr Roberts, the Post Office was not allowed to develop Parcelforce, its own parcels operation, because the UK government regarded money spent on it as nugatory investment.

Approval to purchase German Parcel was the first demonstration of the government's promise to ease restrictions on the Post Office. The ministerial strategy for freeing the corporation while retaining its public sector status will be outlined in a white [policy] paper in a month. "We need a lot of detail on issues including borrowing, investment and regulation," says Mr Roberts.

He predicts a future in which Europe will be dominated by as few as four – perhaps three – big operations. The UK Post Office, along with those of the Netherlands, France and Germany are the market leaders but may not remain so.

The Netherlands post office three years ago acquired TNT, the Australian distribution group, setting a possible trend for dominant organisations to form similar public-private sector amalgamations, or even crossborder mergers between state post offices.

Mr Roberts envisages postal and distribution groups coming together to offer global networks along similar lines to British Airways' one world alliance with overseas airlines. Smaller national post offices would agree partnership deals with main operators.



As German Parcel grew, says John Roberts, the Post Office was not allowed to develop Parcelforce

The importance of the German Parcel acquisition is that it gives the UK Post Office immediate access to a distribution network throughout Europe. German Parcel holds 23 per cent of shares in General Parcel, an international operation serving 30 countries.

Competition for acquisitions is intense in the European market. Post Office managers have refused to divulge how much they paid for German Parcel, though there has been speculation that it was about £300m.

By 2003, further liberalisation of EU postal markets will intensify cross-border competition. One potential approach to the next phase – deregulating specific categories of material, such as direct mail – is unpopular with national postal administrations. They would prefer a straightforward reduction in the existing weight and price monopolies.

"We could not stay within the UK's boundaries and hide from the way world postal services are reshaping, even if we wanted to," says Mr Roberts.

"Overseas competitors would simply eat away at our market and undermine the basis for maintaining the universal, single-price monopoly. We have no choice but to compete."

Island to reject part of offshore financial report

By Clay Harris in London and Philip Jeune in Jersey

The Isle of Man, the UK dependency off the north-west coast of England, does not plan to follow all the recommendations of last year's UK government review of offshore financial regulation.

The island's council of ministers yesterday described its response to the report, by Andrew Edwards, a former Treasury official, as "positive but not slavish". John Cashen, chief financial officer, said: "Where we are saying 'no', they are not major disagreements."

Mr Edwards generally endorsed the arrangements for financial regulation in the Crown Dependencies, which include the Channel Islands of Jersey and Guernsey between England and France, as well as the Isle of Man. But he made a number of recommendations for changes on each of the three islands.

The Isle of Man government is the first to respond formally. It proposed an immediate moratorium on the creation of a class of non-resident companies, which had been criticised by Mr Edwards as "attractive vehicles for evasion of taxes in other jurisdictions".

The island would regulate corporate service providers and transfer regulation of companies from the General Registry to the Financial Services Commission.

It said it would establish an ombudsman facility, and signalled its willingness to amend a double taxation agreement with the UK.

But the island did not plan to merge the FSC and Insurance and Pensions Authority into a single regulatory body. It also said members of Tynwald, the island's parliament, would continue to act as non-executive chairmen of the two agencies.

It also rebuffed Mr Edwards's call for changes to local law and practice relating to trusts.

Tynwald is to consider the report on April 20, in time to deliver an official response before the next scheduled meeting in May between a UK government minister and representatives of the three islands.

Jersey and Guernsey authorities are co-operating closely on their response to the Edwards review. Richard Pratt, director-general of Jersey's Financial Services Commission, said yesterday: "We've agreed a 'no surprises' policy so that we each have a clear idea of what's going on in each island."

NEWS DIGEST

MERGERS AND ACQUISITIONS

Companies 'lag behind non-UK counterparts'

UK companies are lagging behind their counterparts elsewhere in Europe and in the US and in making acquisitions in Europe, according to a study by Close Brothers Corporate Finance, a corporate advisory house.

John Llewellyn Lloyd, chief executive of Close Brothers, said: "UK companies still seem strangely reluctant to take firm steps on to the continent. In the meantime, their competitors in the US and Europe are moving quickly forward to establish solid bridgeheads in what is now the world's second largest market."

In the past three years, the total value of cross-border merger and acquisition activity in Europe has more than doubled to £321.6bn ($517.8bn). But the value of acquisitions by UK companies on the continent has fallen from £6.1bn in 1996 to £5.3bn in 1998. The figures exclude last year's £20.9bn Astra/Zeneca deal. The study shows that two out of every five acquisitions in Europe are now being made by overseas companies, and nearly half of the total value of European M&A activity involves a cross-border deal. The value of acquisitions by European companies into the UK has tripled. **Sathnam Sanghera, London**

KOSOVO CAMPAIGN

Assurance on tax burden

Gordon Brown, chancellor of the exchequer, dismissed fears yesterday that the public finances could be stretched by the costs of a prolonged campaign in Kosovo and repeated his assurance that the tax burden would fall next year. Although the government's contingency reserve for next year is only £2.5bn ($4bn), Mr Brown indicated it was sufficient to cope with the costs of the campaign in Kosovo.

"It is a matter of burden sharing between the allies, but our prudence over the last two years, since we came in government, of cutting the deficit, allows us to plan for contingencies such as this." **David Wighton, London**

RAIL NETWORK

Franchising director named

Mike Grant, a former financial controller at Eurotunnel, operator of the Channel tunnel between France and England, is expected to be confirmed today as franchising director charged with steering the crucial renegotiation of rail franchises with train operating companies. Mr Grant is a former colleague of Sir Alestair Morton, previously co-chairman of Eurotunnel and now chairman of the strategic rail authority. **Charles Batchelor, London**

MOBILE PHONE SUBSCRIPTIONS

Four operators' shares surge

Shares in the UK's four mobile phone operators surged in London yesterday on news of better than anticipated subscriber numbers for the January to March quarter. Traditionally a quiet period for the cellular industry following the Christmas boom, the operators added collectively almost 2m net new customers in the period, only slightly less than the 2.54m put on in the preceding three months. The total for the UK is now almost 15m, indicating that roughly one in four British citizens now owns a mobile phone.

Vodafone consolidated its lead in the UK market adding a net 700,000 subscribers in the quarter, bringing its total to 5.57m. Its shares rose to £12.07 from £11.82 yesterday. Cellnet exceeded analysts expectations adding a net 479,000 in the quarter bringing its total to 4.52m. Shares in British Telecommunications which has a majority stake in Cellnet rose to £10.89 from £10.28. Orange added 370,000 net new subscribers in the quarter for a total of 2.53m. Its shares rose to £9.26½ from £8.94.

One-2-One, whose owners, Cable and Wireless and US West, put the company up for sale last month, saw 329,000 net new subscribers join in the quarter giving a total of 2.53m. **Alan Cane, London**

TEACHERS' PAY PROPOSALS

Government softens stance

The government signalled its readiness yesterday to back down over radical proposals to force schoolteachers to accept a tough new contract in return for higher pay. Classroom teachers were warned in January that, in order to receive a 10 per cent pay rise worth up to £2,000 ($3,220), teachers would "have to make a fuller professional contribution to teaching and learning at the school". Estelle Morris, education minister, told the NASUWT teachers' union that good teachers would be "rewarded for the extra effort they are already putting into the job" under the new pay structure planned for next year. The unexpected move, softening the government's hardline stance, marked a new conciliatory approach after a hostile reaction by the larger and more militant National Union of Teachers last week.

In an allied concession, Ms Morris postponed the full introduction of a new appraisal system – seen as a key plank of the planned performance-related pay structure – until next year. Together, the concessions underline ministerial anxiety about taking on the teaching profession, which is promising industrial action if the government does not rethink its wider plan for reforming teachers' pay and conditions of service. **Simon Targett, Eastbourne**

BSkyB offers assurance on soccer bid

By David Wighton and Cathy Newman

BSkyB, the satellite broadcaster owned in part by Rupert Murdoch's media empire, has offered to exclude the Manchester United soccer club from negotiations on Premier League television rights in an attempt to persuade the government to allow its proposed takeover of the club.

BSkyB has written to Stephen Byers, chief industry minister, saying it would abide by conditions to prevent it gaining access to confidential information about rival bids for broadcasting rights. The company has also given assurances that Manchester United would not initiate any break away from the Premier League. The letter reinforces arguments BSkyB made to the Monopolies and Mergers Commission, whose report on the takeover was delivered to Mr Byers three weeks ago.

There was speculation yesterday that Mr Byers might announce his conclusions before the House of Commons returns from its Easter recess on Tuesday.

BSkyB wrote to Mr Byers following recent reports that ministers were concerned about the enforceability of any conditions imposed on BSkyB regarding transfer of information. BSkyB is understood to have insisted in its discussions with the MMC that there is no risk of information leaking under the current Premier League procedures. It pointed out rival television bids are considered by a committee of league officials and then put to a closed meeting of club chairmen which continues until a decision is reached.

Although BSkyB claimed the rules prevented it gaining any privileged information it said it would agree to the club being excluded from the meeting. Its one caveat was that any other clubs owned by television companies would be excluded and that if there were more than three such clubs the offer would be withdrawn.

Mike Hilton, an analyst at Dresdner Kleinwort Benson, said "Chinese walls" commonly used in investment banks could be put in place between the club and BSkyB. The Independent Television Commission, the industry regulator, has argued that the managements of soccer clubs are not strong enough to abide by any conditions attached to the deal.

A chaste, decorous Salome

OPERA

DAVID MURRAY

Salome
English National Opera, London

At the English National Opera, David Leveaux has revived his 1996 production of Richard Strauss's *Salome*. It is far and away the least "decadent" account of the piece that I have seen, or indeed heard – at least with this mostly new cast; and in any case, Leveaux's chaste basic staging gives no house-room to the usual excesses.

It is a relief, certainly, not to have Salome's final, disastrous monologue tricked out with a pre-rehearsed troupe of campy mimes and dancers. Here Herod's court is merely enjoying a decorous soirée. Not only is John Graham-Hall's sober, incisively sung Herod stripped of his usual archness and neurotic extravagance (though they are in Wilde's original text and Strauss's music), but Elizabeth Vaughan's deliciously crisp Herodias – nothing like Astrid Varnay's bibulous monster, or Anja Silja's haughty witch – has a disarming touch of the Queen Mums.

Nor has the designer Vicki Mortimer taken the usual visual cues from Gustave Moreau and Klimt. Her set is just a corner of some crumbling fortress, good enough for many an act in middle-period Verdi operas. It does have inbuilt log "steps", and a metal ladder, too, upon which people constantly, precariously climb up and down (some more nervous than others) to no evident purpose; but it does not suggest a society foundering amid sexy, illicit flames.

Even Vivian Tierney's Salome performs half her "Dance of the Seven Veils" high on those steps in a gym-slip (with long panels fore and aft, but no veils). That is perhaps the clue: far from Oscar Wilde's original, over-excited conception – "Her lust must needs be infinite . . . perversity without limits" – this Salome is a nice, sturdy young woman, neither sulky nor sly, who dislikes her stepfather Herod but is suddenly and strangely captivated by his captive prophet "Jokanaan" (John the Baptist).

That is how Tierney sings and plays her: with a beautifully clean, sustained vocal line, innocent of riper suggestions, and the fresh open

The brilliantly skittery musical allure is underplayed, and we rather miss it

face and gym-going figure of a girl born to a pleasant, health-conscious life. And if I read Wayne McGregor's choreography for her "Dance" right, it is meant to suggest relived memories of (step)child abuse. Aaah, so *that* was the problem!

That it was a Severe Problem is emphasised here by Jokanaan's severed head, unnaturally naturalistic and gory, soaking through Salome's dress while she sings to it before she snogs it – and all brightly lit, not in the customary decent shadows. (For the first Covent Garden performances of *Salome*, Lord Chamberlain forbade the head to be seen at all.) The grossness of the act makes us think: *This is not, thank God, a real severed head, but a latex fake, and Tierney is faking making love to it.* At that moment, *should* that be what it makes us think?

Vivian Tierney as Salome with Jokanaan's severed head, unnaturally naturalistic and gory

Alastair Muir

Matthew Best invested Jokanaan with sonorous fervour while recuperating from a heavy cold (we lost many of his words). Mark Le Brocq's lovelorn tenor Narraboth is virile and upstanding, the two Christ-wise Nazarenes warmly delivered by Mark Beesley and David Kempster, the five disputatious Jewish scholiasts impersonated with flair.

The conductor is David Atherton: efficient as always, but not imaginatively attuned to this score – which was most deliberately composed to reproduce the contemporary shocks of Wilde's text, amid incessant chromatic flickering and *outré* orchestral effects. Though Atherton locates the musical nodes fairly enough, he *normalises* it all in his plain British way. The brilliantly skittery musical allure is underplayed, and we rather miss it.

Further performances at the ENO tonight, April 10 (early start at 6.30), 16 and 20.

NEW YORK OPERA SUSANNAH

Resurrection at the Met

Forty-four years ago, Carlisle Floyd, an obscure young professor at Florida State University, supervised the first production of his third opera, *Susannah*, a retelling of the biblical story, transported to the isolated mountains of Tennessee. The opera was an immediate success, and has been produced hundreds of times elsewhere in the US and also abroad (Lyons, Vienna, Berlin). Floyd went on to write other successful operas – his *Of Mice and Men* was recently revived at the New York City Opera – while he continued teaching.

Now, after almost 50 years, he has achieved the supreme accolade: he has reached the Metropolitan Opera in New York, where a new staging of *Susannah* has opened, enthusiastically received by the unpredictable Met audience.

It is not hard to explain the warm reception. The story is straightforward (betrayed innocence violently avenged), the music is easy and attractive, and there are meaty roles for two accomplished singers. At the Met, the title role was in the hands of Renee Fleming, a favourite with the public, and deservedly so: earlier this season, her noble, affecting Countess Almaviva threatened to eclipse even the brilliant Susanna (Mozart's, that is) of the effervescent Cecilia Bartoli.

And, as the villainous itinerant preacher Olin Blitch, Samuel Ramey was in dark, splendid form. His long, Bible-thumping sermon in Act Two was the focal bravura moment of the opera, in dramatic contrast with the heroine's sweet, sometimes folksy songs.

There are two tenor parts: Sam, Susannah's drunken but devoted brother, was convincingly interpreted by Jerry Hadley, more familiar in lyrical, tender roles; Little Bat McLean, an ingenuous adolescent enamoured of Susannah, was assigned to the young John McVeigh. Little Bat is an ungrateful character, but McVeigh was vocally more than satisfying.

The trouble with *Susannah* is its superficiality: the text is humdrum, the music is skilful, even tuneful, but it illustrates, without probing. Floyd draws on the American tradition – folk tunes, hymns, square dances – but with scant flair (you have only to think of what Virgil Thomson did with the same sources). Until recently, this opera was staged largely by local companies in small theatres, and though in New York the sets (by Michael Yeargan) take up plenty of space, they have an enlarged look, out of proportion to the linear simplicity of the plot and the honest, realistic, but generally predictable acting of the principals, as directed by Robert Falls.

As usual at the Met, the small roles were tellingly executed; the quartet of nasty church-going women, sung by Jane Dutton (Mrs Gleason), Jennifer Welch (Mrs Hayes), Joyce Castle (Mrs McLean) and Jane Shaulis (Mrs Ott), were a formidable unit; the chorus – an important actor in the story – was also alert, and James Conlon drew strong, tightly paced playing from the Met orchestra.

On its own terms then, this *Susannah* worked, and the opening-night audience showed its approval. There is room for this opera in the repertory, when there are Flemings and Rameys to sing it, as there is room for Cilea and Umberto Giordano in the Italian sector. If we cannot have towering masterpieces every night, we must welcome well-made craftsmanship.

William Weaver

Spiritual dancing without the expected miracles

THEATRE

IAN SHUTTLEWORTH

Geometry of Miracles
Scottish Exhibition Conference Centre, Glasgow

Robert Lepage is a man who delights in bringing together in his presentations disparate elements, perspectives and personalities – this is the man, after all, who in his *Needles and Opium* gave us the combination of Jean Cocteau and Miles Davis. This time the odd couple are architectural pioneer Frank Lloyd Wright and Armenian mystic Georgi Ivanovich Gurdjieff.

Wright's third wife, Olgivanna, had been a disciple of Gurdjieff, and their daughter Iovanna, after a similar period, brought Gurdjieffian programmes of thought raining and spiritual dancing to integrate – and clash – with the holistic approach to architectural and engineering activities at Wright's Taliesin Foundation.

Founding a stage piece on the linkage between the father of "organic" architecture and the man who taught that individuals need to awaken from their spiritual sleep is an inspired move, the more so because Lepage's approach to theatre is fundamentally in sympathy with both men's philosophies – the Quebecois wizard is one of a handful of practitioners transcendentally "awake" (in Gurdjieff's sense) to the storytelling, imagistic and emotional possibilities of theatre.

And yet *Geometry of Miracles* (which I saw as part of the peripatetic "Tramway@" programme in Glasgow), although taking the same approach as Lepage's previous masterpieces *The Dragons' Trilogy* and *The Seven Streams of the River Ota*, is only patchily wondrous.

Perhaps familiarity has begun to breed contempt; having grown acquainted with Lepage's brand of lateral thinking, we are no longer shocked and enchanted into new ways of seeing. When, for instance, the president of Johnson's Wax dictates a letter to his secretary, and tap-dances vigorously on the table to supply the clacking sounds of her mimed typewriter, it seems a neat gimmick rather than a minor *coup de théâtre*.

As I watched Gurdjieff hold a conversation with a giant rotating eyeball, instead of searching for symbolism within the play, my mind wandered to similar pranks by American art-rock band The Residents. At one or two points, the "spiritual dances" seem no more than hackneyed theatre-machine exercises.

Lepage also, unusually, leaves some connections unexplained and even unhinted at. We see that Roderigue Proteau (a Quebecker putting on a heavy Caucasian accent) doubles as Gurdjieff and the stalking, throat-singing Beelzebub who twice tempts Wright (Tony Guilfoyle in a first-rate sardonic performance) in the desert, and we may make vague connections with Christ, but nowhere are we told what Lepage plainly knows and a few of us might also, independently, have learnt – that Gurdjieff's main prose work is whimsically entitled *Beelzebub's Tales To His Grandson*.

Now and again, too, Lepage seems not to know when to stop. Gurdjieff's frustration at his disciples' lack of individuality is fully conveyed within the first three minutes of a lengthy scene of dramatic follow-my-leader, but on and on it goes.

'Geometry of Miracles': having grown acquainted with Lepage's brand of lateral thinking, we are no longer shocked

E. Valette

Similarly, the piece as a whole seems to have about four successive codas. Lepage can keep an audience spellbound for seven hours and more, so to say of this less than three-hour work that it begins to drag towards the end is serious. Of course, by anyone else's standards, it is a tremendous production, almost effortlessly reinventing space and modes of performance.

At the Royal National Theatre, London, from April 14 (0171-452 3000).

INTERNATIONAL

Arts Guide

AMSTERDAM

DANCE
Het Muziektheater
Tel: 31-20-551 8911
Dutch National Ballet: programme combining the Dutch premiere of Acts of Light by Martha Graham, with the world premiere of Krzysztof Pastor's Bitter Sweet, and Balanchine's Symphony in C; Apr 8, 9

OPERA
Netherlands Opera, Het Muziektheater
Tel: 31-20-551 8911
Otello: by Verdi. Conducted by Carlo Rizzi in a staging by Klaus Michael Grüber, with a cast led by Vladimir Bogachov; Apr 10, 13

BERLIN

OPERA
Deutsche Oper
Tel: 49-30-34384-01
Matthäus-Passion: Christopher Hogwood conducts Johann Bach's and Felix Mendelssohn's score; staged by Günther Uecker, Götz Friedrich and Dietlinde Calsow; Apr 8, 10

BONN

EXHIBITION
Kunst- und Ausstellungshalle der Bundesrepublik Deutschland
Tel: 49-228-917 1200
www.kah-bonn.de
High Renaissance in the Vatican: Art and Culture at the Papal Court (1503-34). The early 16th century saw Papal Rome establish itself as the centre of art in Europe: the Vatican commissioned work from such great artists as Leonardo da Vinci, Michelangelo and Raphael. This exhibition displays some of the masterpieces that resulted, as well as detailing the contexts in which they were produced; to Apr 11

LONDON

CONCERTS
Barbican Hall
Tel: 44-171-638 8891
Glenn Miller Orchestra: conducted by Ray McVay performing wartime classics; Apr 10
Queen Elizabeth Hall
Tel: 44-171-960 4242
Camerata Academica: in works by Mozart, with violin soloist Isabella Faust, and viola Tabea Zimmermann; Apr 7
Royal Festival Hall
Tel: 44-171-960 4242
● BBC Philharmonic: Endless Parade: Benjamin Britten is celebrated here in a performance entitled "Classics of British Music Since 1945. Conducted by Yan Pascal Tortelier and featuring the BBC Singers; Apr 10
● London Philharmonic Orchestra: conducted by Leon Botstein in works by Wagner, Khachaturian and Dvořák; Apr 9
● London Philharmonic Orchestra: International Series featuring Hadyn's The Creation conducted by Sir Roger Norrington; Apr 11
● Philharmonia Orchestra: conducted by Vladimir Ashkenazy in works by Bernstein, Gershwin, and Rimsky-Korsakov; Apr 7

EXHIBITIONS
Hayward Gallery
Tel: 44-171-261 0127
www.hayward-gallery.org.uk
Patrick Caulfield: major retrospective of the British pop artist; then touring in Europe and the US; to Apr 11
National Gallery
Tel: 44-171-839 3321
Portraits by Ingres: Images of an Epoch. 40 paintings and 50 drawings by the 19th century French painter. Includes major loans from museums in France, the US, and elsewhere; then touring to the US; to April 25

OPERA
English National Opera, London Coliseum
Tel: 44-171-632 8300
● Mefistofele: by Boito. Conducted by Oliver von Dohnányi in a new staging by Ian Judge; Apr 9
● Salome: David Atherton conducts Richard Strauss' opera, starring Vivian Tierney as Salome in David Leveaux's production; Apr 7, 10

LOS ANGELES

CONCERT
Music Center: Dorothy Chandler Pavilion
Tel: 1-213-365 3500
www.laphil.org
Los Angeles Philharmonic: conducted by Hans Vonk and featuring Lars Vogt on piano in works by Webern, Mozart, and Schubert; Apr 7, 10, 11

MADRID

EXHIBITION
Fundación Juan March
Tel: 34-91-435 4240
Marc Chagall: Jewish Traditions. 40 paintings by the Russian-French painter, produced between 1909 and 1976. They detail Chagall's progression through such styles as Expressionism, Cubism and Surrealism; to Apr 11

NEW YORK

CONCERTS
Avery Fisher Hall, Lincoln Center
Tel: 1-212-875 5030
www.lincolncenter.org
New York Philharmonic: Uptown Blues - Ellington at 100: presented by Jazz at Lincoln Center in conjunction with the Philharmonic to mark the 100th anniversary of the Jazz great Duke Ellington. Brings together the Lincoln Center Jazz Orchestra (with Wynton Marsalis) and the New York Philharmonic (led by Kurt Masur). The program features Ellington's compositions arranged by Marsalis along with a performance of the Peer Gynt Suite; Apr 8
Pierpont Morgan Library
Tel: 1-212-685 0008
Collection in Concert: From Bach to Berg: featuring John Aler (tenor), Krista Bennion Feeney (violin), Michael Kannen (cello) and directed by Laurie Smukler and Ira Weller; Apr 8

EXHIBITIONS
Guggenheim Museum
Tel: 1-212-423 3500
www.guggenheim.org
Jim Dine: Walking Memory, 1959-1969. More than 100 works make up this survey of the American artist; including photographs, paintings and performance pieces; to May 16
Metropolitan Museum of Art
Tel: 1-212-879 5500
www.metmuseum.org
Our New Clothes: Acquisitions of the 1990s: presented by the Costume Institute. Focuses on themes such as American Heroes which highlights designers Geoffrey Beene, Calvin Klein, and Giorgio di Sant'Angelo; to Aug 22

OPERA
Metropolitan Opera, Lincoln Center
Tel: 1-212-362 6000
www.metopera.org
● Giulio Cesare: returns to the repertory with John Nelson conducting and Jennifer Larmore in the title role. Production by John Copley, sets designed by John Pascoe, and costumes by Michael Stennett; Apr 10
● Susannah: by Floyd. James Conlon conducts a new staging by Robert Falls, with a cast led by Renée Fleming and Samuel Ramey; Apr 9, 13
● The Queen of Spades: by Tchaikovsky. Conducted by Valery Gergiev in a revival of Elijah Moshinsky's staging, designed by Mark Thompson. The cast is led by Plácido Domingo (replaced by Yuri Marusin on Apr 3), Galina Gorchakova and Olga Borodina; Apr 7, 10

PARIS

OPERA
Opéra National de Paris, Opéra Bastille
Tel: 33-1-4473 1300
www.opera-de-paris.fr
Lucia di Lammermoor: by Donizetti. Conducted by Bruno Campanella in a staging by Andrei Serban and Robert Carsen, with designs by William Dudley; Apr 8, 11

PERUGIA

EXHIBITION
Galleria Nazionale dell' Umbria
Tel: 39-075 574 1247
Beato Angelico and Benozzo Gozzoli: Renaissance Painters. Organised to mark the 500th anniversary of Fra Angelico's death, this show includes missing sections of his Polittico dei Domenicani; to Apr 11

TOKYO

CONCERT
Suntory Hall
Tel: 81-3-3584 9999
Japan Philharmonic Symphony Orchestra: conducted by Kazufumi Yamashita in works by Beethoven, Rodrigo, and Ravel and featuring Kaori Muraji on guitar; Apr 11

DANCE
NHK Hall
The Royal Ballet: the British company's tour opens with Swan Lake; Apr 11

EXHIBITION
Bunkamura
Tel: 81-3-3477 9999
Apéritif and Wine Poster Exhibition: a collection of Forney City Library of Paris. 200 apéritif and wine posters from the late 1800's to the 1960's; to Apr 25

TV AND RADIO

● **WORLD SERVICE**
BBC World Service radio for Europe can be received in western Europe on medium wave 648 kHZ (463m)

EUROPEAN CABLE AND SATELLITE BUSINESS TV

● **CNN International**
Monday to Friday, GMT:

06.30: *Moneyline with Lou Dobbs*
13.30: *Business Asia*
19.30: *World Business Today*
22.00: *World Business Today Update*

● **Business/Market Reports:**
05:07; 06:07; 07:07; 08:20; 09:20; 10:20; 11:20; 11:32; 12:20; 13:20; 14:20.

MARTIN WOLF

The road to hell

Having involved itself in Kosovo, Nato must win. This requires ground troops and military commitment for the indefinite future

Occasionally, economics must take second place. The war in Kosovo is such an occasion. This is a defining moment in the history not just of post-cold war Europe, but of the transatlantic alliance. Slobodan Milosevic has challenged Nato in the most brutal and calculated manner. He must not win.

No less a man than Bismarck, Germany's iron chancellor, famously remarked that the Balkans were not worth the bones of a single Pomeranian grenadier. This ethnic patchwork, border zone between religions and hotbed of irredentist myth has always been perilous.

Opponents of outside involvement can add three more general reasons for standing aside: that no significant western national interest is engaged; that it is inconsistent, indeed hypocritical, to baulk at President Milosevic's behaviour in Kosovo and tolerate equally grave abuses elsewhere; and that it is particularly unwise to intervene within a sovereign nation. All these arguments have merit; none is decisive.

It is true that no vital national interest is engaged, particularly for the US and the UK. It is ridiculous to justify this war by comparisons between Milosevic and Hitler. Yet it is at least equally foolish to remove all humanitarian concerns from the purposes of moralistic democracies. The urge to do something is not discreditable, provided results justify the action.

It is also true that the west seems inconsistent, at best, and racist, at worst. It is prepared to respond in former Yugoslavia, but ruled out action in Rwanda and has tolerated crimes elsewhere. Yet that it is excessively costly, or counter-productive, to intervene against some abuses cannot mean it is wrong ever to do so. The calculation must depend on the scale of the wrong and the costs of halting it.

And yes, interventions in conflicts within sovereign states are particularly difficult to justify. The notion could too easily mean *carte blanche* for the strong to interfere in the internal affairs of the weak. Against this, however, is the fundamental principle that a state does not own its citizens. Some behaviour should deprive a state of the right to rule, as America's Declaration of Independence asserted of far less heinous offences than these.

Thus, Nato was not wrong in principle to intervene. But to be justified, in practice, its intervention had to have a good chance of improving the outcome. Cheap gestures were not enough. On the contrary, a decision to intervene ineffectively could easily be worse than nothing. To this untutored eye, the intervention over Kosovo is, up to now, precisely that. President Milosevic has concluded he has nothing to lose and much to gain from creating an ethnically "pure" Kosovo. Western bombing seems to have accelerated this activity, while persuading more Serbs to support their president. As for those who trusted the west, they are being murdered and exiled.

This is worse even than a humanitarian disaster. The credibility of the west is now at stake. That makes this a vital interest. If President Milosevic gains the day, Nato's viability is in question, at the very least in out-of-area interventions.

Nato now has to win – and be seen to win. This is both a moral and a strategic imperative. A peace that amounts to acquiescence in the facts created on the ground would be not just a crime, but also a blunder. Yet that seems the probable outcome. President Milosevic has, as expected, announced a brief ceasefire. He may proffer the partition of Kosovo, albeit vastly in the Serbs' favour. The west, worried over hundreds of thousands of refugees, will be sorely tempted to agree.

To do so would be to accept defeat. The British prime minister, Tony Blair, understands this. In an article published in the *Sunday Telegraph* over the weekend, he argued that "our goal must be to ensure that these people can return to their homes. We cannot and must not accept Milosevic's ethnic cleansing." Mr Blair wills the ends. But do he and his colleagues, above all president Clinton, also will the means?

Those, like me, whose speciality lies not in military affairs can only harbour doubts. But the doubts are both pressing and disturbing.

Did western political leaders take proper account of the probable response of president Milosevic to their bombing campaign?

Did they think they could halt the Serbian forces in Kosovo with air power?

Do they believe that a limited bombing campaign will force president Milosevic to undo his brutal solution of the Kosovo question?

Do they seriously hope that the Serbs, steeped in myths of national struggle and deprived of information about events within their own country, will round on the Milosevic regime?

If, as I fear, the answer to all these questions is no, then this action has been fundamentally frivolous. That would be far from surprising: in President Clinton, the west has a leader almost uniquely ill-qualified, by temperament and personal history, to confront such a crisis. Nothing could be more tempting for a politician both horrified by the prospect of casualties and imbued with vague humanitarian aspirations, than to hope that technology would give him, if not a victory without tears, a gesture without regrets. If so, he is wrong. What has happened is defeat. If not reversed, it becomes a disaster.

It is harsh to throw all the blame on the US president. After all, Kosovo is, for Americans, truly a far-off place of which they know little. The countries directly concerned are European, with Germany and Italy the most vulnerable of the big member states of the European Union. But everyone knows that the Europeans lack not just the means to intervene effectively, but the will to do so. It is as true today as half a century ago that the security of Europe remains in the hands of the US. The question now being raised is for how much longer this will remain the case. It is impossible to believe that a failure by Nato to impose its will on this small recalcitrant state can leave this alliance – or western credibility – undamaged.

"The Yugoslav crisis began in Kosovo, and it will end in Kosovo." This is a popular saying in the region. If anything, it seems optimistic. But even if it proved true, what would be the impact of a Milosevic victory on the attempt to create a living transatlantic security partnership in the post-cold war world?

It is easy to sympathise with those who argue the west should never have involved itself in the death throes of former Yugoslavia. It may well be true that its interference over the last decade has made that unravelling even more horrible than it might otherwise have been. But it is far too late – and was always unrealistic – to take that position. The west is deeply involved. It has now reached the end game. It must put a firm limit on the activities of the man, who has, more than any other, exploited the dissolution for his own nefarious ends.

Nato must now win. It may have to accept partition of Kosovo, but it must be one in favour of the ethnic Albanians. I presume this means a ground invasion. I presume, too, that it means a western military presence in the region for the indefinite future and creation of an economic framework, through the EU, that promotes, in time, the emergence of a web of fruitful economic relations.

Yet the starting point must, as Mr Blair says, be victory over Milosevic. Nato did not have to begin this war. It chose to do so. Now, it has to finish it, on its terms. To enter the war may have been a mistake; to lose it would be a disaster. Nato has the means. Now it must will them.

Martin.Wolf@ft.com

How Punch saw the region's woes in 1895 Punch Ltd

LETTERS TO THE EDITOR

Smoothing China's path into WTO

From Mr Barber Conable.

Sir, With Zhu Rongji, the Chinese premier, arriving in the US tomorrow, time is of the essence to stress the need for an international commitment to reaching an agreement on accepting China into the World Trade Organisation. A re-write of WTO rules is scheduled for later this year, which could complicate China's application.

The US, Europe and others stand to gain a great deal from an agreement. China should be subject to the same trade rules affecting other nations. Given the size and rate of growth of its markets, China's accession means more jobs internationally, along with bigger profits for any business that wants to sell to China. The World Bank has vigorously promoted trade liberalisation, and has cited collaboration with the WTO over Chinese accession as a means of strengthening the global economy.

China has already shown how the the prospect of WTO membership can result in trade policies beneficial to the west. And WTO regulation of trade interaction with China could create a more stable Asia, favourable to the advancement of western political, diplomatic and security interests. The international community should press China to open its markets, but not get stuck on details that could prevent an agreement that is good in most respects.

Both Chinese concessions and flexibility by existing WTO members will be required to reach a deal. All concerned should work to conclude an agreement, and then move forward with establishing normal trade relations (formerly known as MFN, or most favoured nation status) for China.

Barber Conable,
president, World Bank 1986-91,
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Alexander,
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US

CBI has commissioned its own poll on euro

From Mr J. Adair Turner.

Sir, You report (March 31) that, according to a survey by Business for Sterling, the lobby group, only 41 per cent of British businesses favour joining the euro, in contrast to previous polls conducted by MORI.

Business for Sterling also claimed that 64 per cent of members of the Confederation of British Industry opposed the euro.

This is not true, and Business for Sterling's poll did not show this. Of the 1,013 companies polled, only 116 were CBI members. Of these, 62 (52 per cent) said they would vote for the euro in a hypothetical poll held today. Seventy (60 per cent) said their preferred strategy was to join immediately or to prepare and probably to join.

Business for Sterling managed to turn this result into a majority opposing by applying weighting that was extremely unrepresentative of CBI membership, the impact of which has been seriously misleading. The six members of the smallest band (0-4 employees) were each given a weighting 139 times larger than each of the companies with more than 250 employees. As a result, just six members cast more than half of all the votes Business for Sterling chose to count. In Business for Sterling's new version of statistical truth, just six companies could therefore determine CBI policy.

The CBI meanwhile has commissioned MORI to poll both its direct members and a representative sample of companies affiliated to trade associations in CBI membership. We will publish the results in July.

J. Adair Turner,
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Puzzled by contradictory lines on inflation

From Mr Keith Wedmore.

Sir, "Greece to take tough line on inflation", you tell us (April 1), and is "ready to take additional measures including even indirect tax cuts". I am puzzled.

This says that a reduction in, say, value added tax will reduce *inflation*. But I can recall, having been in the Inland Revenue some 40 years back, that when British governments then raised purchase tax they smugly saw a double advantage: two anti-inflationary measures in one. The extra tax would reduce their own temptation to print money, and the populace would buy fewer goods (they would have to spend more to get the same car); and the reduction in buying, from a reduced purchasing power, would be an effective break on inflation.

Which is it?

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PERSONAL VIEW JAMES A. BAKER III

China: engage not contain

The bilateral relationship with China is the most important the US now has. It is too important to be made into a domestic political football

The visit to the US of China's prime minister, Zhu Rongji, comes at an extraordinarily difficult time in US-China relations. The United States has no bilateral relationship today more important than its relationship with China. It is incumbent upon us, therefore, to "get it right". And it is hard to be sanguine that we will, given the foreign policy record of the current administration, given the fact of divided government in the United States with a Congress controlled by Republicans and a Democratic president, and given the fact that 2000, a presidential election year, is fast approaching.

Eight months ago, I suggested that the White House should stop whining about Congress's opposition to its China policy and engage the leadership there in negotiating and formulating a bipartisan accord on our approach to this most important relationship. The impeachment of President Clinton made this impossible to accomplish, although I do not believe any effort was ever made by the administration even to begin discussions. Now there is a real risk that the US's China policy will become a domestic political football, which would be truly regrettable. I believe there is a majority in the centre, both in Congress and in the country, who would agree upon a China policy consisting of the following fundamentals.

- Our policy toward China should be as complex and nuanced as our interests there – not a policy based on a single issue such as human rights, commercial advantage for US firms, anti-proliferation concerns, Taiwan or something else.
- Our policy should be one of commitment to engagement with China rather than isolation or containment of China.
- Our policy should recognize that engagement can include symbolic gestures such as summits, but it must encourage China to move in a direction that promotes US goals and interests.
- Our policy of engagement must require that we be firm, consistent and principled in those areas where we have significant concerns: trade, human rights, proliferation of weapons of mass destruction, Taiwan and stability in Asia, and Chinese spying upon our nuclear weapons programs.

On trade, in working out the terms of China's membership in the World Trade Organization, we must insist on baseline obligations for transparency, protections for investors, market access, (particularly in agriculture, insurance and chemicals) intellectual property protection, dispute resolution and limitations on prison labor exports. We should not agree to China's demand that it must, under any circumstances, join the WTO before Taiwan.

Zhu Rongji: 'Uneasy' over the anti-Chinese mood in the US Reuters

On human rights, the American people are rightfully outraged by China's treatment of political prisoners. Improvements in human rights will improve dramatically only if there is systematic economic and political reform.

Increased cultural, legislative, and high-level diplomatic exchanges, along with greater economic interaction, will work better than expanding economic and political sanctions. But engagement should not be used to excuse lack of progress in human rights practices.

On proliferation, we should encourage China to adhere strictly to the Missile Technology Control Regime, to abandon what in the past were irresponsible military sales to rogue states, and to co-operate with us to confront nuclear threats on the Indian sub-continent and the Korean peninsula.

On Taiwan and stability in Asia, we should make clear that we will support any peaceful resolution of differences between the PRC and the people of Taiwan. We should leave no doubt we will continue to help our friends in Taipei to have an adequate defence, and will consider unspecified actions in the event of an attack by China on Taiwan – all demanded in the Taiwan Relations Act.

And we should continue to maintain our credible military presence in the Pacific, which has been a force for stability in the region since the end of the second world war.

On spying, we should not be shocked that China spies on us. Even some of our friends do. And of course, we spy back. However, we *should* be shocked when we learn that not only has China's spying been successful, but that it was not acted upon for an undue period of time in order not to conflict with our policy of engagement. That is a terribly erroneous and destructive understanding of what engagement should be.

We should also understand that the best way to find an enemy is to look for one. And that is what we are doing when we talk about containing rather than engaging China. Many in Congress and various interest groups, particularly on the left of the Democratic party and the right of the Republican party are doing precisely this.

These are two other issues creating problems for the administration in its policy of engagement. These arise from possible Chinese efforts to interfere in or influence the 1996 elections and from possible unauthorised transfers of technology related to the launch of US satellites. Both of these disturbing matters are under investigation. The Executive Branch must guard against any repeat of events such as those triggering such investigations if there is to be any chance of an improvement in US-China relations.

Engagement doesn't just mean doing business with China. It means being in a position to influence Chinese behaviour in ways that promote our interests. More than anything else, we need the administration to look at the medium-to-long term in its approach to China. For example, while it would be nice to be able to announce China's accession to the WTO during Zhu Rongji's visit, if we do not get a firm, solid, and enforceable commitment to the necessary economic liberalisation by China, we would simply be doing what this administration does best – trading short-term political gain for long-term policy trouble.

The policy I suggest is in the national interest of the US. Polls indicate it would be supported by a majority of the American people. More importantly, it is the right policy prescription for this all-important relationship.

The author was the 61st Secretary of State

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COMMENT & ANALYSIS

FINANCIAL TIMES
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Wednesday April 7 1999

Giving refuge to refugees

The airlift of Kosovo refugees from Macedonia has got off to a sorry start. Some refugees had to be strong-armed by local police on to aircraft bound for far-off destinations such as Turkey and Norway, after they protested at being separated from their families. This miserable spectacle made the operation look more like another Serb-style deportation than the mercy mission that Nato countries intended it to be.

It also heightened the impression of Western unpreparedness for the Kosovo refugee crisis, and opened a raging debate over whether refugees should be kept within the region or evacuated further afield until Nato eventually creates the conditions for their safe return to Kosovo. This is a false debate. So numerous are the refugees – according to the United Nations' conservative estimate nearly 400,000 people have fled Kosovo in the past two weeks – that all means have to be used to care for them.

What prompted the airlift was Macedonia's refusal to let in any more refugees unless an equivalent number were airlifted out of the country. It was understandable that Macedonia's Slav-dominated government should be concerned about the Kosovo Albanian influx tipping the demographic balance against it, but unreasonable for it to demand a mass airlift as its price for admitting the 65,000 refugees still piled up on its border. Thankfully, Skopje has now relented a bit.

Governments in the rich west should take some of the direct refugee burden off poor Macedonia and, for that matter, Albania. The latter has, implausibly, said it will take in any Macedonia overspill when it cannot yet cope with the 220,000 refugees it already has. The presence of more Kosovar refugees in Europe and the US will ensure their plight is not forgotten. But evacuation must be voluntary. The vast majority of refugees will want to stay in the region where family reunification is easier, provided they can get adequate food and shelter there. Supplying this must now be the main task of the West and Nato.

At the same time, the experience of the Palestinians and other refugee diaspora must not be repeated by letting tent cities along Kosovo's borders become permanent. All the more so, because the exodus is largely the result of ethnic cleansing. The refugees must be allowed to return to their homes with their safety guaranteed by a military force, as Nato insists. The alliance was thus right to ignore Belgrade's announcement yesterday of an Easter ceasefire. It is now not good enough for President Milosevic just to pause after two weeks of ethnic cleansing; he must reverse that brutal process by letting Nato troops into Kosovo to accompany the refugees home and guard them there.

Media dance

The deal between News Corporation and Liberty Media is just the latest twirl in the elaborate gavotte of media owners. This one brings together John Malone, who built up TeleCommunications (TCI) and Liberty Media, and Rupert Murdoch. They have twirled together before, and tried alternative partners; doubtless there are more dance pairings to come.

But the deal illustrates two striking industry themes. One is how important sports are to Mr Murdoch's view of the world.

From the outset, he has used them as a fierce competitive weapon. Male appetites for sports programming has helped Mr Murdoch to build big audiences for his networks – on satellite in Europe, over the air in the US – in defiance of entrenched "establishment" opposition.

In recent years, he has increasingly moved towards acquiring sports teams themselves, as in the bid by BSkyB for Manchester United, currently awaiting competition clearance in the UK. In the deal with Liberty Media, News Corporation acquires full ownership of Fox/Liberty Networks, which provides regional sports programming.

Sports may not be a majority interest, since they have only limited appeal to women. But they passionately absorb the attentions of an important minority. The search for such passionate minorities is the essential task for media insurgents, as they seek to overturn patterns of viewership established by the more tepid majority. The discovery of how sports can serve this role will be Mr Murdoch's legacy, when eventually he hands over stewardship of his companies.

That time is brought no closer by this latest transaction. But by binding Mr Malone and Mr Murdoch into a fresh relationship, it underlines the way in which media's entrepreneurial era is drawing to a close. The deal unites two of the men who have helped create that era, and who are now gradually leaving the stage to others.

Indeed, in one sense the entrepreneurial era is already over for much of Mr Malone's empire. Liberty Media is just a tracking stock for American Telephone and Telegraph, into which TCI and Liberty merged last month.

Mr Murdoch remains more decisively in charge. He still continues – as the Manchester United bid and the unsuccessful talks with Canal Plus suggest – to add to News Corporation's activities. But these transactions, like the Liberty Media deal, feel more like the work of corporate strategists than entrepreneurs.

For Mr Murdoch and Mr Malone, the media dance continues. But the most breathtaking choreography seems now to lie in the past.

Devolution

Recent British general elections have centred on bitter battles over tax. The campaign for Edinburgh's parliament, now officially under way, appears no different. However, decentralised government in the UK will lead to an argument about money which will be more acrimonious and long-lasting than a squabble over a penny or two on income tax.

Following the budget announcement that from next year the government will cut income tax, the Scottish Nationalist party pledged that it would reverse the cut in Scotland and spend the money on education.

The SNP thinks this is a vote-winner because Scottish voters will happily pay higher taxes for better public services. Labour thinks that the SNP has shot itself in the foot by revealing its anti-enterprise colours. Scottish business leaders have shrieked at the proposal. The Scottish CBI, which wants a level UK playing field, warns that the SNP's signal could turn away investors.

This is good political knockabout. More significant is the issue which Labour hopes to avoid, and the SNP pretends does not exist: public spending per head by the UK government is more than 20 per cent higher in Scotland than in England.

Gordon Brown, the UK chancellor, has rightly pledged that the Treasury will ensure that the Scottish parliament sticks to agreed spending limits, notwithstanding its tax-raising powers.

However, he hopes to keep quiet about the Tartan subsidy. Perhaps this is understandable during an election. But when Scotland's parliament is up and running, with limited powers to vary taxes and spending if it so chooses, this will no longer be an option.

Higher spending in Scotland is the result of a funding mechanism based on a public need test carried out in the 1970s. This was later modified by the Treasury under the Barnett formula. But with Scottish income per head now roughly the same as in England, this large subsidy can no longer be justified.

Moreover, the Barnett formula, which also includes Wales and Northern Ireland, makes no provision for redistribution of this sort to English regions. In a unitary state, this anomaly was well enough concealed. Devolution, by bringing it into the open, makes it unsustainable.

Greater transparency over spending is a good thing. However, regional allocation threatens to become a running sore in British politics. The government should appoint an independent commission to revisit – and regularly update – the Barnett formula for the whole of the UK. A problem which is ignored will not go away.

Still waiting for the dawn

Japan's businessmen are feeling slightly less pessimistic. Unfortunately, says **Paul Abrahams**, this is not a good reason to turn bullish about the world's second largest economy

Is Japan finally recovering? The reaction to this week's survey of Japanese business confidence suggested it might be. There had been fears that the quarterly Tankan survey – the most important gauge of Japan's corporate sentiment – would show a further deterioration. Instead, it showed that optimism among Japanese executives actually improved for the first time in nearly two years.

The survey was seized upon by politicians as evidence that the economy, mired in its longest recession on record, might be bottoming out after five quarters of decline. Kiichi Miyazawa, the country's venerable finance minister, triumphantly announced: "The economy has gone through its worst phase."

But such optimism may be misplaced. After all, the survey showed that for every 100 companies that think business conditions will get better, there are still 147 that think the matter will get worse (compared with 149 before). The danger is that this blip represents not the start of a "V"-shaped recovery, but a pause before the economy slips into a double-dip recession – more of a "Z" than a "V". Since July 1997, the economy has contracted by 3.9 per cent. Most private forecasters have just downgraded their predictions and few are predicting even a single quarter of growth over the next year.

For the moment, though, such pessimism is not the view of politicians who, as spring arrives in Tokyo, have been quick to point out any green shoots. Their optimism is not delusional. A Y24,000bn public spending package has had an undoubted effect. The recapitalisation of the banks has, for the moment, contained the banking crisis. And restructuring efforts by the corporate sector have helped spark a 15 per cent jump in the benchmark Nikkei 225 index over the past three months. Foreigners are even giving Japan a vote of confidence by buying Japanese assets – Renault's acquisition of a controlling stake in Nissan is only the most high profile of acquisitions by overseas investors.

But the "bottoming-out" of the economy, as Japanese politicians call it, should not be exaggerated. Positive economic data for January have been succeeded by glum figures for February. Industrial production fell, inventories rose, capital investment slumped, retail sales continued to decline and consumers' propensity to spend their shrinking incomes dropped to an all-time low. The Bank of Japan this week concluded it was too early to say the economy was recovering.

The problem for the Japanese authorities is that three of the four potential biggest components of growth – non-housing investment, consumption and net exports – are contracting. These components represent more than 70 per cent of the economy.

Capital spending and consumer consumption are unlikely to recover any time soon because of the wave of restructuring – *risutora* – among Japanese companies. This is undoubtedly necessary, since most groups remain chronically overstaffed and have been allocating capital to non-economic projects on a massive scale. Even now, in the depths of recession, about 14 per cent of the country's gross domestic product is being invested in new plant and equipment. That compares with about 9 per cent in the US now, at what may be the peak of the cycle.

But while restructuring may be good for the individual companies, the equity market and, in the long term, the economy, the short-term effects could be damaging. For example, this week's survey showed Japanese companies planned to cut capital spending by 13 per cent. That should help them make better use of their capital but it will hurt capital producers. Similarly, companies say they are planning to lay off workers. That will help them become more labour-efficient. But Taichi Sakaiya, minister at the Economic Planning Ministry, warned the unemployment rate could jump from 4.6 per cent to 5.2 per cent - over 4m.

High unemployment, combined with falling overtime and bonuses, have already had a devastating effect on incomes and Japanese consumers' desire to spend. In February, household spending fell 3.4 per cent year on year, while the spending itself fell from 70.9 per cent to 67.8 per cent of income, the lowest level since records began in 1970.

With private capital spending and consumer consumption slumping, the onus has fallen on the public sector to prevent the economy falling into a cycle of decline. The government has frontloaded 80 per cent of its public spending this year into the first six months, and there are already rumours of a supplementary budget for September.

But there are limits to how much debt the government can issue without long-term interest rates rising. Already, the yield on the benchmark 10-year bond has more than doubled in the past six months to 1.64 per cent. The danger is nterest rates could rise at a time when the government is trying to ease monetary policy.

If the economy does continue to slide and the combination of virtually zero short-term interest rates and fiscal stimulus remains inadequate to generate growth, Mr Keizo Obuchi, the prime minister, and his ruling Liberal Democratic Party, will be faced with some unappealing options.

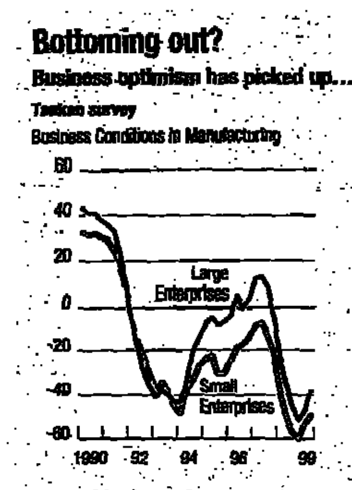
With an election to the lower house required before autumn 2000, Mr Obuchi's is likely to spend as much money as possible in key constituencies. But such spending sprees often have little effect, because local governments are reluctant to spend, or be distorting, because they are skewed to construction projects. Such policies are about containing the damage, not solving the economy's problems. This fiscal stimulus is just too late, not just in time.

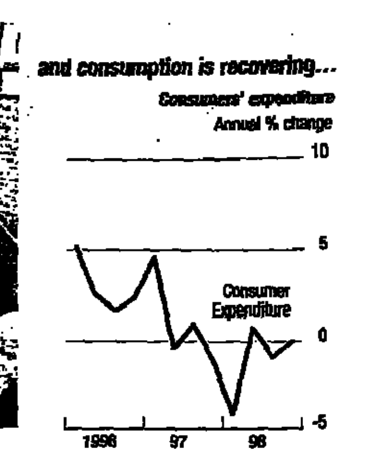
There is a growing body of opinion that for Japan to snap out of its recession requires a short, sharp shock, similar to the one that appears to have galvanised South Korea's economy. Reform-mionded bureaucrats argue that the government should stop supporting the equity and property markets, allowing them to fall to a level where they can drop no further. This would create liquidity in the market and provide a base from which investors could buy with confidence. It would also force Japanese companies to restructure more quickly and deeply.

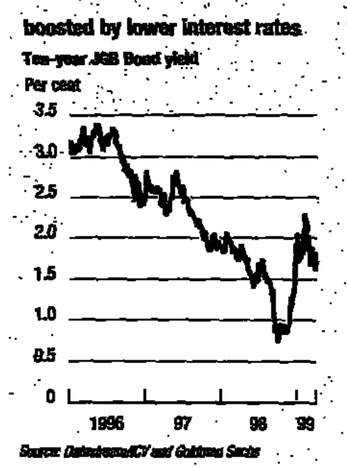
However, the political will to implement such changes is non-existent. There is little support for such ideas within the ruling party because of the political damage from the likely sharp rise in unemployment. Nor is pressure likely to come from abroad. Top US officials appear hostile to a policy of creative destruction, calling it "The Purge". Their view is that the global economy is not robust enough to cope with a prolonged recession in the world's second largest economy.

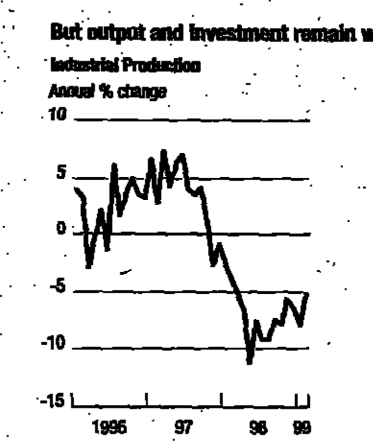
The prospect of Japan muddling through may be the best option for the rest of the world, but it may not be what Japan's economy needs to bounce back. The sad conclusion is Japan may drift further downwards before it begins to improve.

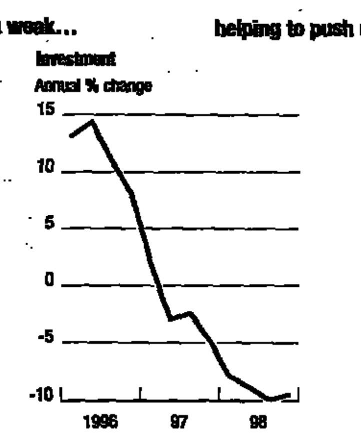
Bottoming out?

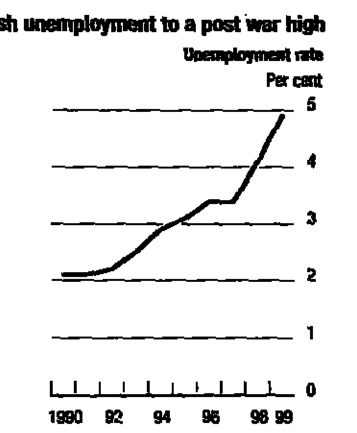












Source: Datastream/ICV and Goldman Sachs

The Bank of Japan snaps its magic wand

The deputy governor tells **Gillian Tett** that he has no monetary conjuring trick to make recession disappear

With conventional spending remedies exhausted, some politicians and investors have been hoping the Bank of Japan will wave a magic wand and conjure up a happy ending by issuing vast amounts of yen.

Yesterday, however, Yutaka Yamaguchi, the influential deputy governor, scotched hopes that the Bank would do anything like this. In a rare interview, he finally admitted what few bureaucrats have stated before: that even the Bank has little faith it can save Japan from deflation by itself.

"I believe that we have reasonably exhausted all the policy measures," Mr Yamaguchi declared, pointing out that the Bank had already reduced interest rates to almost zero. "I think there is a limit to what (more) monetary policy could do."

Such a stance is not shared by all of his eight fellow members on the Bank's policy board. Some have recently called for new targets for monetary growth or inflation in a last-ditch attempt to boost demand. Politicians have also called for the Bank to purchase government bonds.

Mr Yamaguchi denies that an inflation target would help much. "I do not believe that a simple announcement of inflation targets alone will be enough to produce a turnabout in inflationary expectations among the public." And he insists that monetary targets are an uncertain policy instrument since Japan's beleaguered banks will need to cut their assets to become more profitable. "I don't think quantitative easing would work because there is little room for manoeuvre in interest rates and there is a malfunctioning of the banks' intermediary role."

Critics say this is complacent. Optimists retort that it shows a welcome mood of realism. In recent weeks some bureaucrats appear to have finally accepted that Japan cannot stave off restructuring with magic wands. Instead, they mutter, it would be better to have a hard landing, and use the shock to push through real structural change.

Thus far, the diplomatic Mr Yamaguchi is not calling for a hard landing himself: he simply notes that what is needed is a rethink of "the entire environment around consumers". But with an election looming, the policy battle between bureaucrats and politicians could intensify. And that could weaken the bureaucrats. Though admitting there is no magic wand might make sound economic sense, it does not look a popular message to give the electorate.

OBSERVER

Custer sets up his stand

The words "shy" and "retiring" have rarely been used to describe John Charles Custer Malone, the cable king whose company has just become the second-largest investor in Rupert Murdoch's News Corp.

But the billionaire Liberty Media boss has been called almost every other name in the book. Vice President Al Gore once compared him to a certain inter-galactic baddie for allegedly increasing cable rates – but Malone wasn't stirred. "It's fun being Darth Vader," he explained.

Only five years ago, the one-time McKinsey consultant looked set for obscurity as a brave but failed cable pioneer; then along came last year's deal to weld together his TCI cable business with AT&T. But he's always been a hard player. According to one recent book by veteran reporter LJ Davis, when the ski resort of Vail, Colorado, demanded better things to watch and no price rise, Malone cut off all programming for a weekend, helpfully screening the phone number of the city's mayor in case viewers wished to complain.

And his rumbustious style proved so successful that by the end of the 1980s even some of his secretaries were stock millionaires.

But now he's astounded his audience by taking only non-voting stock in the media empire of his old sparring partner Murdoch. So is Malone about to morph into an unassuming, passive investor, leaving his days as a jedi warrior far behind him? Don't bet your light sabre on it.

Liar, liar

If you want to charm Canada's finance boss, you'd be well advised not to breathe a word about bank mergers. The whole subject has caused Liberal Paul Martin countless headaches.

His latest migraine comes from a hotly debated passage in a recently published book in which he's quoted as calling the country's leading bankers "liars" over their assurances about merger plans.

But Martin insists he was misquoted by the author of *The Banks*, a veteran Toronto Star reporter. He says he merely called the bankers "rivals".

Martin was angered last year when two of the country's biggest banks made a surprise announcement that they planned to merge – even though they'd previously agreed to bide their time. Plans for another bank get-together, unveiled shortly after, added to his woes and in the end he blocked the deals.

The controversial quote has raised questions about whether Martin let his anger over the banks' tactics influence his decision to nix the mergers. He's fired off letters to the chairmen of Canada's five largest banks, denying he ever used the L-word.

The reporter stands by his account of the conversation and says he's got a high-quality tape to prove it. In return, Martin's office has hired an audio production company to review the finance ministry's own cassette of the conversation. But results have been inconclusive. Anyone got an aspirin? The finance minister's headache doesn't look like it's getting any better.

Coining it

No one ever thought justice came cheap. But it's proved pretty high-priced in a proposed class action settlement between the family of Ferdinand Marcos, the late, not terribly lamented, dictator of the Philippines, and some of his victims.

Marcos's nearest and dearest recently agreed to pay $150m to a group of nearly 10,000 victims of claimed human rights abuses that included torture, extrajudicial killings and illegal detentions.

Under the deal, which has yet to be approved by the courts, a legal team led by US lawyer Robert Swift will receive some $34.5m for their 13-year effort to pursue the Marcoses.

While the fees will be split on as yet undisclosed basis between a team thought to be about 30-strong, there's not much doubt that the advocates will receive rather more than the $12,000 expected to be doled out to each of Marcos's victims.

Which sounds all very just – even if there's rather more justice for some than for others.

Happy hoarding

It's time to stash the beans in the basement. The prophets of doom are worrying themselves and others sick about the millennium bug – and that, for some, means a beautiful business opportunity.

Two months ago Robert Thompson, a former street kid and clearly a man with an eye for the main chance, set up Grainstore.com, a company that wants to make a pile out of stockpiling.

His brainchild has already shipped 25 trailer loads of wheat, rice, oats, corn and beans – and Thompson, who built the Valencia independent film studio in Hollywood, supplies appropriately basic recipe books as well.

So far, the customer list includes Mormon churches, survival stores and an ear-doctor in Florida.

What's more, sheltering the family from all those aeroplanes plunging from the skies needn't break the bank. For $495, Grainstore.com promises enough grain to feed four people for six months. Presumably the pet parakeet won't go hungry either.

The Financial Times

100 years ago

Yankee Whisky War
In France, the consumption of wine last year dropped by 300 million gallons, but still stands at almost 22 gallons per head. The consumption in Germany has decreased by 49,500 gallons, or from 2.29 to 1.34 gallons per head. The United States has just doubled its consumption, the total amount accounted for being slightly over 32 million gallons, the amount drunk per head – 44 – being double that of 1896. France keeps up her reputation for drinking large quantities of wine, the amount drunk there being three times the amount drunk in Britain, the States and Germany put together.

50 years ago

North Atlantic Pact
Washington, April 6. Following the signing of the North Atlantic Pact and its anticipated ratification by the United States Senate, the Administration is expected to present to Congress a proposal to provide around $1,500m. for military Lease-Lend aid to pact signatories and others. In practically all discussions it has been assumed that this would represent an additional military appropriation here.

FINANCIAL TIMES

WEDNESDAY APRIL 7 1999

THE LEX COLUMN

The risks of war

The Kosovo crisis has been a virtual non-event in world financial markets. True, the euro suffered a downward blip as investors steered money towards the dollar's safe haven – a move partially reversed after yesterday's ceasefire from Belgrade. But investors have been largely unconcerned. Indeed, both the US and UK stock markets have hit new peaks this week.

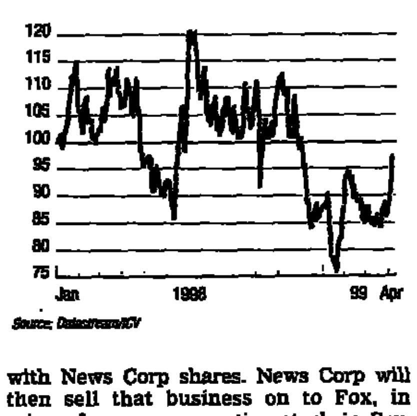
Is this insouciance rational? It rather depends how the crisis unfolds. If Slobodan Milosevic eventually gives in to Nato's demands to pull Serb troops out of Kosovo – and maybe yesterday's ceasefire is a signal that his resolve is cracking – investors can sleep easily. But there are at least two other plausible scenarios: that ground troops will have to be sent in to expel Serb troops; or that Nato will lack the will to finish the job.

Neither is likely to be good for markets. True, Serbia is irrelevant from a global economic perspective: it is small, fairly poor and largely closed to trade following years of sanctions. However, there could be an impact on the risk premium which helps determine the valuation of financial assets. A ground war would raise obvious risks. The consequence of a scenario in which Nato failed to finish the job might be less direct.

But given that part of the explanation for the bull market is that the end of the Cold War cut the risk premium by making the world safer, such a blow to Nato credibility should be bearish.

News Corporation

News Corporation
ADRs relative to the S&P Entertainment sector



Source: Datastream/ICV

News Corporation shares are all the rage after a lacklustre few years relative to its US entertainment peers. Now not one but two media moguls, John Malone and Prince Alwaleed Bin Talal, want to fill their boots with the non-voting ADRs. Valuation arguments aside, it is somewhat surprising that their interest has alighted on News Corp rather than the newly-quoted Fox Entertainment Group, which contains the more glamorous bits of News Corp's US empire, such as sports rights and films.

Another oddity is the structure of the deal struck between News Corp and the Malone-controlled Liberty Media Corporation. News Corp is buying Liberty's share of a joint venture with Fox, and is paying with News Corp shares. News Corp will then sell that business on to Fox, in return for more non-voting stock in Fox. There must be simpler ways of deal-making, but apparently not when tax experts get involved.

From Fox's perspective, the deal makes straightforward commercial logic. Owning a clutch of regional sports programmes outright should mean easier cross-promotion of Fox products. More intriguing is how Mr Malone will use his new clout as News Corp's second largest shareholder. A Murdoch/Malone double-act can surely not be comfortable for rivals like Time Warner and Disney.

Pharmaceuticals

AstraZeneca made its debut yesterday at an apparently inauspicious time for European drugs stocks. The good news about drug launches seems to be dominated by US companies, the bad by the Europeans. US market growth – in double digits – is roughly double the European rate. All the virtues, notably well funded clients and freedom to advertise, seem to lie in the US. All the vices, such as stingy government clients, seem to reside in Europe. No wonder the European drugs sector has underperformed its US counterpart by more than 40 per cent in the past five years.

But how long can this divergence go on? In the US, spending on healthcare already consumes about 14 per cent of gross national product, up to twice as much as in EU countries. Next year's presidential election may revive the debate about healthcare reform that hit American drug stocks in the early 1990s. So where does the greatest opportunity lie: in pushing US spending higher, or in releasing pent-up demand in Europe?

Thanks to the internet, information on diseases and treatments is circulating more freely in Europe. This will stimulate not only demand but a willingness to pay.

Investors currently view such changes as a long way off. And European companies, too, are paying homage to the US market by beefing up their transatlantic sales forces. Some may also go a step further and engage in transatlantic mergers. But the advantages of the US are already in share prices. The biggest scope for a rerating lies in consolidation within Europe.

MCI WorldCom/Nextel

Mobile phones are telecommunications' current hot product. Yet MCI WorldCom, one of the industry's hottest companies, has no wireless presence. It is no wonder that, after briefly flirting with Airtouch in January, it is now apparently talking to Nextel Communications, one of the last independent wireless providers in the US.

Closing such a glaring gap in its product portfolio is surely right. But Nextel might be the wrong target. Its radio-based technology has a narrower spectrum than either cellular or PCS, which could lead to long-term capacity constraints. And with its loyal but largely blue-collar customers, it may not be the best vehicle for holding on to MCI WorldCom's traditional big business customers as they switch their long-distance traffic from wireline to wireless. In addition, Nextel's phones and network equipment are made only by Motorola, so WorldCom would not benefit from competition between suppliers.

Nextel would also be expensive at over $20bn, including $7.4bn of net debt. Since it is still draining cash as it builds out its network, a straight acquisition would dilute MCI WorldCom's earnings by 25 per cent – which Bernie Ebbers, chief executive, has always shied away from. Instead, he could buy Sprint PCS or bid for new third-generation cellular licences and build his own network. Nextel is not MCI WorldCom's only chance to go mobile.

WTO host is accused of selling top-level access

By Nancy Dunne in Washington

International companies have been invited to help pay for the World Trade Organisation's ministerial meeting in Seattle.

This has prompted claims that the city's host committee is selling access to government officials.

The Seattle Host Organisation, which is seeking to raise $9.2m for the ministerial meeting, has sent a fundraising letter to companies around the world.

Those company representatives will be attending a parallel private sector conference, in late November while the WTO discusses the launch of a new round of trade negotiations.

Non-governmental organisations, which are also seeking a voice in the negotiations, contend they are being sidelined.

Dan Seligman of the Sierra Club, an international environmental group, said the host organisation had gone too far. "This is about buying access to government without provision for equal treatment of other interest parties," he said.

Pat Davis of the host organisation responded: "We're going to have to get 400 contributors. No individual company will be able to say they bought this meeting. But if you're going to give more than $200,000, you might want more than a cardboard mug out of it."

Officials at the WTO in Geneva also expressed concern and said the trade organisation would be running the talks, not the host committee.

"It is the responsibility of the host nation to fund the ministerial conference," said Keith Rockwell, spokesman for the WTO. "The way in which they arrange for funding is their business. However, they would have to follow WTO rules and guidelines."

While it has become common for the private sector to meet alongside government officials in multilateral meetings, non-governmental organisations claim the host organisation is engaging in strategies reminiscent of American political fundraising. Those giving the most money are promised the greatest access to delegates and the highest visibility.

There are six "sponsorship levels". Companies which donate at the highest level will be able to bring five guests to opening and closing receptions, five guests to the ministerial dinner and four guests to a business conference. They get briefing updates on the progress of the meeting, press events and "signage and display" of corporate materials.

During the conference they will also be brought together with industry leaders and senior government officials.

Aside from the fundraising tactics, concerns have also been raised by Airbus, the European aerospace consortium, because its US rival Boeing is co-chairing the Seattle Host Organisation with Microsoft, who are also a Seattle based company. The Seattle ministerial meeting is expected to bring many thousands of protesters, who oppose trade liberalisation. They often accuse governments of letting business write world trade rules at the expense of the public interest. Ralph Nader, the consumer rights activist, is reported to have rented a parking lot next to the ministerial meeting centre for protests, and there have been more concerns than usual about security.

Bank of Japan warns of risk of consumer price deflation

By Gillian Tett and Paul Abrahams in Tokyo

Japan's economy risks facing its first real bout of consumer price deflation later this year, because the prospects for economic recovery remain weak, Yutaka Yamaguchi, the Bank of Japan's deputy governor, warned yesterday.

Mr Yamaguchi said: "There is reason to believe that downward pressure on prices could intensify in the coming quarters. The price outlook for 1999 has to be rather weak. However, if you are talking about minus 2 per cent deflation in the CPI [consumer price index] then that sounds a bit too large on the negative side." Last year, the CPI grew at just 0.7 per cent.

Mr Yamaguchi added that this deflationary risk could be averted "if economic activity improves". Although the Bank believes that there could be improvement in industrial production in the coming months, he sees little prospect of a significant recovery in consumer spending or capital investment soon, which together account for about 60 per cent of the economy. "There is a substantial gap between available capacity and actual output. Leading businesses are looking at disposing of capital stock rather than increasing it," Mr Yamaguchi said.

"It is difficult to envisage a robust recovery in consumer spending when major businesses are restructuring themselves seriously."

The comments are likely to be scrutinised by the financial markets, because Mr Yamaguchi is considered to be one of the most influential figures in government.

A new battle between bureaucrats and politicians over economic policy is likely to break out in the coming months. The government of Keizo Obuchi has insisted that the economy will expand by 0.5 per cent this fiscal year. Bureaucrats fear that, in an effort to achieve that target, the prime minister may be tempted to pass another supplementary budget this autumn and create a further large spending package.

However, Mr Obuchi is likely to run into fierce opposition from the ministry of finance, which is concerned about the effect of additional issuance of government bonds on long-term interest rates and the nation's long-term fiscal position.

Mr Yamaguchi said he was against inflation-targeting as a method of tackling the deflationary problem. He did not believe that setting targets in itself would affect consumer expectations.

He added: "It is difficult to establish credible targets because of the lack of credible instruments." Short-term interest rates are almost zero in Japan.

"Targeting monetary growth would be difficult because banks needed to cut assets to become more profitable in the future," he said. "I don't think quantitative easing would work because there is malfunctioning of the banks' intermediary role."

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Russian girls look at 'Monica's Story', the tale of Ms Lewinsky's affair with President Clinton, which went on sale in Moscow yesterday. AP

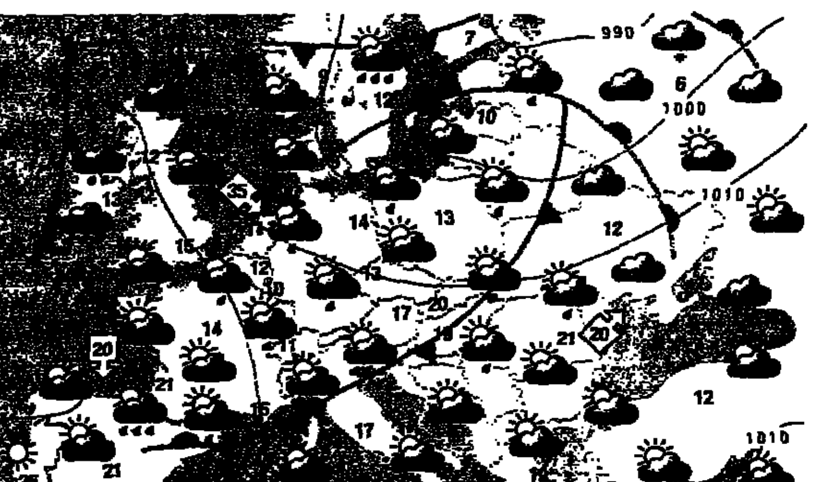
FT WEATHER GUIDE

Europe today

The Mediterranean and the Balkans will be sunny although showers will affect north-east Spain, the French Riviera and northern Italy. Much of central and north-west Europe will be breezy with sun and showers. The most prolonged showers will be in and around the Alps with snow above 3,500 feet. Scandinavia and north-east Europe will be showery with snow likely in northern Scandinavia and western Russia..

Five-day forecast

The central and eastern Mediterranean, including the Balkans, will become more unsettled with showers, especially over Italy. High pressure will bring sun to Spain and Portugal. Much of north-west Europe will become dry and warm, although northern Britain, Scandinavia and north-east Europe will continue changeable..



Situation at midday. Temperatures maximum for day. Forecasts by PA WEATHERCENTRE

TODAY'S TEMPERATURES

		Maximum Celsius
Abu Dhabi	Sun	40
Accra	Fair	32
Algiers	Sun	24
Amsterdam	Shower	11
Athens	Sun	19
Atlanta	Fair	29
B. Aires	Fair	21
B.ham	Fair	12
Bangkok	Thunder	35
Barcelona	Fair	18
Beijing	Fair	20
Belfast	Shower	13
Belgrade	Sun	22
Berlin	Shower	14
Bermuda	Fair	22
Bogota	Shower	20
Bombay	Sun	33
Brussels	Thunder	12
Budapest	Shower	20
C.hagen	Shower	9
Cairo	Fair	21
Caracas	Sun	23
Cardiff	Fair	12
Casablanca	Sun	23
Chicago	Sun	22
Cologne	Shower	9
Dakar	Sun	24
Dallas	Showers	28
Delhi	Sun	36
Dubai	Sun	33
Dublin	Shower	13
Dubrovnik	Sun	19
Edinburgh	Shower	13
Faro	Sun	23
Frankfurt	Shower	11
Geneva	Rain	11
Gibraltar	Sun	22
Glasgow	Shower	12
Hamburg	Shower	10
Helsinki	Rain	7
Hong Kong	Fair	28
Honolulu	Fair	26
Istanbul	Sun	14
Jakarta	Thunder	32
Jersey	Fair	13
Johannesburg	Fair	26
Karachi	Sun	38
Kuwait	Sun	29
L. Angeles	Fair	16
Las Palmas	Fair	23
Lima	Sun	26
Lisbon	Sun	25
London	Shower	15
Luxbourg	Shower	10
Lyon	Rain	13
Madeira	Fair	21
Madrid	Sun	21
Majorca	Fair	20
Malta	Sun	19
Manchester	Rain	12
Manila	Fair	32
Melbourne	Fair	20
Mexico City	Sun	28
Miami	Sun	30
Milan	Shower	16
Montreal	Shower	12
Moscow	Fair	6
Munich	Rain	11
Nairobi	Thunder	27
Naples	Fair	17
Nassau	Sun	28
New York	Fair	21
Nice	Shower	16
Nicosia	Thunder	20
Oslo	Shower	9
Paris	Shower	14
Perth	Sun	33
Prague	Rain	13
Rangoon	Shower	35
Reykjavik	Rain	0
Rio	Shower	30
Rome	Fair	17
S. Frsco	Fair	15
Seoul	Fair	17
Singapore	Shower	34
Stockholm	Fair	12
Strasbourg	Rain	12
Sydney	Fair	20
Tangier	Sun	24
Tel Aviv	Shower	17
Tokyo	Fair	14
Toronto	Rain	15
Vancouver	Rain	11
Venice	Shower	16
Vienna	Fair	17
Warsaw	Fair	13
Washington	Fair	24
Wellington	Shower	19
Winnipeg	Fair	9
Zurich	Rain	11

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FINANCIAL TIMES
COMPANIES & MARKETS
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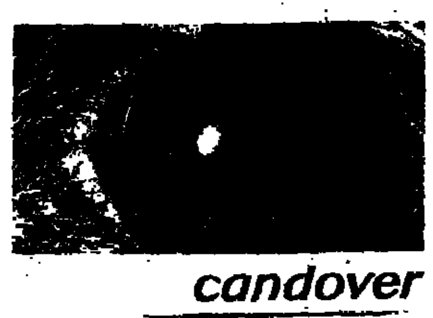

INSIDE

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MARKET STATISTICS

Gillette shares tumble as growth slows

Company blames Brazilian recession and falling Real for slide in earnings

By Victoria Griffith in Boston

Shares in Gillette tumbled almost 12 per cent in early New York trading yesterday.

The fall followed warnings by the US consumer products group, best known for its razors and Duracell batteries, that its first-quarter earnings would fall short of analysts' estimates. After the close of trading on Monday, Gillette blamed weakness in Latin America and in its Braun electrical appliances division.

It said sales growth would be in the low single digits. First-quarter earnings are now forecast at 24 cents a share, against expectations of 25 cents, according to the First Call research group.

Since hitting a peak of $64¾ on March 23, the stock has lost almost 22 per cent of its value. At midday yesterday, Gillette shares were trading at 51\frac{1}{16}$.

The stock was already under pressure after Goldman Sachs cut its sales forecast last week. At the same time, one of Gillette's main shareholders, investment group Kohlberg Kravis Roberts, decided to shed at least half its holding in the group.

Although Gillette said it expected to return to its historic growth rate of 15-20 per cent in the second half of this year, some analysts believe this is over-optimistic.

Catherine Lewis, at Morgan Stanley Dean Witter, said she was "no longer confident" the company could generate earnings per share growth of between 15 and 20 per cent.

During the last quarterly results announcement, Al Zeien, Gillette chief executive, said the devaluation in Brazil might help the company by making it cheaper to manufacture goods there.

Gillette has a large export-oriented factory in the country. But the company is now blaming the fall in the Real, as well as the accompanying recession in Brazil, for much of its first-quarter troubles.

Adding to the uncertainty, the company is going through sweeping changes following large-scale restructuring. Next week, just after the company's annual meeting, Mr Zeien will hand the chief executive's reins to Michael Hawley, the company's current president.

Under Mr Zeien, Gillette became one of the best performing companies in the US, in terms of both sales growth and stock price.

With mature razor and blade markets in the US, he expanded overseas, particularly in developing countries, and invested heavily in research and development. Those investments culminated in the popular Sensor razor earlier this decade, and the three-blade Mach3 razor.

Since then, the razor and blade division has been growing strongly. US razor and blade sales are expected to increase by more than 10 per cent in the first quarter.

Credit Suisse seeks talks over probe

By Gillian Tett in Tokyo and Clay Harris in London

Senior officials at Credit Suisse are trying to negotiate with Japan's Financial Supervisory Agency over the inspection of the bank's operations in Tokyo, it has emerged.

Rainer Gut, global chairman of Credit Suisse's operations, is expected to travel to Tokyo this week, partly to meet with the FSA regulators, company officials have indicated.

In recent days, other senior global officials from Credit Suisse First Boston, the group's investment bank, have also made extensive contacts with the FSA in Tokyo.

The bank's London and Swiss operations fear that the conclusions of the FSA inspection, which covers compliance procedures, could undermine its Japanese operations.

The inspection marks the first time the FSA has conducted a surprise investigation of a non-Japanese bank.

The FSA has refused to discuss the case in public, but the inspection is understood to include an investigation into whether Credit Suisse has helped Japanese clients such as Long Term Credit Bank to "window dress" their financial accounts in recent years. This refers to ploys used to flatter year-end results

The case was triggered by material which the FSA gathered last year during its separate inspection into Japan's largest 19 banks. The conclusions are likely to be closely watched by other Western bankers in Tokyo.

Credit Suisse has refused to comment in public on the inspection, which started in mid-January. "We understand this is part of the normal regulatory work of the FSA," it said.

Some Japanese media reports have claimed recently that the FSA is considering reprimanding the Swiss bank. In the worst case, this might include a temporary suspension of part of CS's banking licence.

However, the case is expected to continue for several more weeks.

Some Western lawyers believe the FSA will find it difficult to produce conclusive evidence of wrongdoing at any Western bank because of ambiguities in interpretations of Japanese financial laws in recent years.

Reed Elsevier directors quit amid turmoil

By Cathy Newman in London

Reed Elsevier's troubled search for a chief executive erupted in acrimony yesterday, after two directors of the Anglo-Dutch publisher resigned and discussions ended with the leading candidate for the job.

The 72-year-old founder of Elsevier, Pierre Vinken, and his colleague Loek van Vollenhoven, resigned as members of the Elsevier's supervisory board and as directors of Reed Elsevier. They stepped down at a special board meeting yesterday, citing "differences of opinion over the management of the recruitment process".

The company simultaneously said it had abandoned talks with the favourite candidate for the post of chief executive – Jonathan Newcomb, chairman and chief executive of Simon & Schuster, the US book publishing group.

It declined to clarify why it had ceased talks with Mr Newcomb. It said only its search for a chief executive "will not now be concluded as quickly as had been hoped".

In a separate statement, Mr Vinken and Mr van Vollenhoven, they said they had resigned because the "objective [the appointment of a chief executive] has not been realised", despite starting in August in 1998. As a result, the "chairman of the Recruitment Committee should have drawn the necessary conclusions and resigned". They added: "We were not prepared any longer to accept responsibility for this state of affairs."

The breakdown was a further setback for Reed Elsevier, which has taken much longer than planned to appoint a single chief executive. The move is a departure for the group, which previously divided senior responsibilities between a British and a Dutch executive. However, people close to the company denied the latest difficulties were due to an Anglo-Dutch split.

The board unanimously accepted the two resignations yesterday afternoon. Mr Vinken had been due to retire at Elsevier's April 14 annual meeting. The company would not be drawn on reasons for the differences of opinion. However, it appeared there was a split between the younger generation of managers and Mr Vinken and Mr van Vollenhoven, who were both at Elsevier long before it merged with Reed International, the UK publisher, in 1993.

The news, which came after the stock market closed, followed a series of announcements which have adversely affected Reed International's share price over the past year. Last month, the group reported disappointing results.

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Europe's junk bond market shows signs of life

By Edward Luce and Khozem Merchant

The European junk bond market has sprung back to life with a number of UK and continental companies launching high-yield bonds in the next few days.

The revival of the European market, which in effect closed down after the Russian debt default last August, follows the recovery of the US junk bond market over the last few weeks with $25bn worth of bonds issued in the first quarter of 1999.

European telecoms companies – including UK-based NTL which will launch a £200m ($322m) bond this week – have led the recovery in primary market issuance.

Others, including Jazztel, the Spanish telecoms company which was the first entity from Spain to issue a high-yield bond, tapped the market with a euro-denominated bond just before the Easter break.

Lavipharm, a Greek pharmaceuticals company and Fairchild Corp, a UK aerospace company, are expected to issue euro-denominated bonds in the near future.

Dura Automotive, a UK company, and Doncaster, a UK engineering firm, are also expected to launch sterling and euro bonds.

"The market is definitely back to where it was before the Russia crisis," said John Wotowicz, head of European high-yield at Morgan Stanley. "The next few weeks looks like a full calendar." Officials attribute the recovery to the absence of any global financial shocks since Brazil was compelled to float the real in January – it can take up to three months to prepare a junk bond offering.

"Investor demand for European high-yield has been strong all year but some borrowers have been nervous of starting long road-shows only to find there is another crisis by the end of it," said one.

According to Morgan Stanley's European high-yield index, average yields on European junk bonds have fallen from a high of almost 13 per cent last October to nine per cent this week – marginally higher than yield levels prior to the Russian devaluation.

Bankers Trust said that there had been nine high-yield bond offerings by European companies in either sterling or euros this year, three of them in the last week.

At least five more are expected within the next fortnight.

BARRY RILEY

Closed-end escape routes

Yesterday marked the beginning of the UK's tax year and the start of company tax changes that could prove especially challenging for investment trusts, the closed-end investment funds that are struggling to improve their stock market status.

All kinds of British companies now have more scope to buy back their equity. But investment trusts are under particular pressure to do so because the average discount at which their shares trade compared with net asset value has widened from 4 to 12 per cent over the past five years. A shareholding in a typical trust has underperformed the All-Share Index return by more than 20 per cent over the same period.

However, many trust managers are apprehensive about buybacks. Mopping up some loose stock might not be a problem, but nobody knows the extent of contraction required to squeeze the discount back to, say, 5 per cent. Already authorisations for 120 buyback programmes have been sought. Few have been implemented but at the recent rate of attrition, including takeovers and restructurings, the £60bn ($96.6bn) sector would largely disappear in 10 years.

Money, unlike mud, does not always stick. Although Mercury European Privatisation Trust, for example, has been active for three years running a buyback programme of 16 per cent of its stock, its discount remains wide at nearly 18 per cent (although there has been some benefit to the net asset value).

MEPT's discount is similar to that of the sector's flagship fund, Foreign & Colonial. One fund cannot solve the discount problem on its own. If it tries, arbitrage will simply restore the status quo.

Across-the-board buybacks would be hard to organise. Trusts that refused to co-operate would benefit as much from a general contraction as those which bite the bullet.

The industry's trade association, the AITC, would prefer to emphasise positive marketing plans rather than defensive repurchases. It is trying to persuade member trusts to agree to a generic promotional campaign, costing £27.5m in year one. There are dreams of jumping on to the bandwagon of stakeholder pensions in 2001. But a step change in marketing costs might be reflected in a further discount widening.

Meanwhile, the technicalities of buybacks are preoccupying investment bankers. Clumsy implementation might hand many benefits to market makers. Some fear buybacks would fail to get institutional investors, which own two-thirds of trust shares, out anywhere near asset value.

Investment trusts are retail vehicles that have become institutionally owned largely by default, although institutions may be willing long-term holders of certain specialist funds. £220m has already left the sector through recent repurchases by 28 trusts without visibly denting discounts.

Repurchasing at these discounted market prices penalises the sellers and rewards continuing investors. Trust directors may consider that bias to be appropriate, but such tactics may also serve to legitimise wide discounts. The alternative of buying at net asset value, turning the trusts into quasi open-ended funds, would be fairer to the sellers but might cause headlong shrinkage.

Investment trusts must not sacrifice their fundamental advantages. Their closed-end structure permits them to pursue long-term strategies, including investment in illiquid assets, and to employ leverage through long-term borrowings. The provision of continuous secondary liquidity to investors should not be the dominant issue. Plenty of successful retail investment products, after all, impose big early redemption penalties.

Even long-term investors, however, can reasonably expect occasional opportunities to avoid the discount. Setting redemption options every few years may prove a more fruitful approach than the debilitating drain of repeated buyback programmes which offer no certainty of achieving their objectives at an acceptable cost.

COMPUTING US GROUP AIMS TO BECOME MORE AGILE

HP to give units autonomy

By Louise Kehoe in San Francisco

Hewlett-Packard has divided its computer and printer operations into four independent business units in the latest phase of a broad restructuring aimed at making the second largest US computer company more agile.

"The internet and competitive pressures have changed our lives, and we simply must move faster and more decisively if we are to meet customers' needs and maximise shareholder value," said Lew Platt, chairman and chief executive.

The four business units – enterprise computing, computer products, inkjet printers and laser printers – will each have their own president and chief executive. The units will operate with a high degree of independence, with responsibility for their own manufacturing, distribution, business partners and staffing, the company said.

"We've coupled greater autonomy and greater accountability," Mr Platt said.

Management pay would be based directly on financial performance, he added, announcing the promotion of four senior executives to head the newly independent business units.

Ann Livermore, previously general manager of HP's corporate computing systems business, will become president and chief executive of the Enterprise Computing Solutions business. Duane Zitzner, who led HP's resurgence in the personal computer market, will head the new Computer Products group. Antonio Perez and Carolyn Ticknor, both HP veterans, will head the inkjet printing and laser printing businesses.

The executives would have full authority to "adapt their business models to their own competitive landscapes", said Mr Platt. They are expected to appoint senior staff over the next few weeks.

Hinting at significant changes, Mr Platt said the executives may choose not to rely upon corporate services in future. For example, he said, some businesses might build their own acquisition and alliance teams or customer-support organisations.

The formation of independent business units follows HP's announcement last month that it plans to spin off its measurement and test equipment, medical and chemical analysis systems and electronic components operations into a separate company.

At that time HP also said it was starting a search for a new chief executive for the remaining core business, to replace Mr Platt who plans to retire in about a year.

Yesterday HP said it expected the yet to be named spin-off company to become an independent entity by mid-2000.

HP's shares were down $1 13/16 in early New York trading yesterday at $69 3/4.

Lew Platt: 'We must move faster and more decisively'

Nextel advances on bid hopes

By Andrew Edgecliffe-Johnson

Shares in Nextel Communications, the US wireless telecommunications group, rose again yesterday on renewed speculation of a possible takeover by MCI WorldCom, Bernie Ebbers' US long-distance telecommunications group.

By midday, Nextel's shares had risen $5/16 to $40 7/16, valuing the company at $11.5bn. In the past month, its shares have risen from $28 13/16. MCI WorldCom's shares fell $3¼ to $40 3/16, however, as some analysts voiced concerns that Nextel would make a less than perfect target.

Neither company would comment, but discussions between the two are believed to be in their early stages, with a significant chance of failure.

Nextel has hired Lazard Freres and Morgan Stanley to advise it, while MCI WorldCom is advised by Salomon Smith Barney. All three banks declined to comment.

MCI WorldCom, which is chaired by Bert Roberts, made an unsuccessful approach in January for AirTouch, the US cellular telephone company that was subsequently bought by Vodafone of the UK.

Shares in Nextel jumped by more than 40 per cent during the bidding for AirTouch, as analysts focused on the scarcity of independent wireless companies and the rapid pace of consolidation in the industry.

MCI, which was bought by WorldCom last year, first showed an interest in Nextel in 1994, but it abandoned its plan to invest $1.3bn in the company, citing technology concerns.

An acquisition of Nextel would be impossible without the approval of Craig McCaw, the cellular pioneer, and Motorola, which developed Nextel's technology. Each owns about 20 per cent of Nextel's stock.

Analysts cautioned yesterday that, at the current share price, Nextel would dilute MCI WorldCom's earnings by 20-25 per cent next year.

They added that, until recently, Mr Roberts has been explicitly cautious about investments in wireless properties, saying that they would lose value because of additional competition.

Merrill Lynch analysts said, however: "We believe MCI WorldCom will eventually need a wireless product in the US."

They identified three possible ways the company could achieve this: buying Nextel; acquiring Sprint PCS, the digital mobile arm of the third largest long-distance telecommunications provider; or investing in MMDS, the third generation of digital licences.

Lex, Page 16

ICO issue is set at only $5

By Christopher Price

The parlous state of the fledgling hand-held satellite mobile telecommunications market was underlined yesterday when ICO Global Communications launched a $1bn rights issue at a deep discount to its Nasdaq share price.

The UK-based group will issue rights at $5, a 43 per cent discount to the $8½ price prior to the announcement.

News of the move sent the shares down 18 per cent in early New York trading to $7 1/16. The shares were priced at $12 when ICO went public nine months ago.

Melvin Pointer, ICO acting finance director, blamed "the Iridium factor" for the share price decline, which had also hit the price of Globalstar, the third operator.

Iridium, which launched the first use-anywhere satellite mobile phone service last November, was forced to reschedule part of its debts recently after disappointing sales and revenues. It also lost its finance director and has been forced to restructure its organisation to address marketing difficulties with its service partners.

If successful, the ICO move will take to $4bn the amount the company has raised from debt and strategic and retail investors. ICO said this would meet its cash needs until the first quarter of 2001. The total cost of the system is $4.7bn.

Despite the share price decline, Mr Pointer said a rights issue remained the most efficient method of raising funds. It would also make the ICO stock more liquid – 95 per cent of the shares are held by original strategic investors.

It is expected that Hughes Electronic Corporation, the US aerospace group, will take up to $100m of the rights issue. Hughes is providing satellites, control equipment, launch services and network systems for ICO. The minimum take-up requirement for the issue to proceed is $500m.

BANKING CONSORTIUM RESTRUCTURES

Three banks take control at Integrion

By John Authers in New York

Integrion, the 18-bank US consortium set up in 1996 to build a platform for electronic banking, yesterday unveiled a radical restructuring which will see three banks take over the prime responsibility for decision-making.

The three banks – BankAmerica, Bank One and Washington Mutual, which all completed big acquisitions last year – will take the three seats on the board. Each previously held a 5 per cent stake in the company, and this has now been increased, although the banks did not give the precise stakes they would now hold.

Two banks – KeyCorp and Royal Bank of Canada – are leaving the consortium, while the other founding members, which include International Business Machines and the Visa USA bank card association, have reduced the stakes they hold in the company. IBM continues to provide technology for the venture, although the member banks have the freedom to use other suppliers.

All the remaining owners are investing extra capital, which will go towards continued investment in offering extra banking services.

The move follows debate between the owners over the future of the organisation. It is seen as a way to make decision making easier, and to resolve any potential conflicts between owners.

Integrion now has more than 750,000 direct banking customers, but some in the industry are backing rival solutions. Citigroup, which remains a member of the Integrion consortium, late last year announced that it was also joining a rival project with Microsoft, called Transpoint.

When Integrion was started, in September 1996, it was seen as a vehicle to allow banks to fight off a perceived challenge to their hold over the payments system from software companies, led by Microsoft. Industry leaders were stung by a comment from Bill Gates, Microsoft chairman and chief executive, likening banks to "dinosaurs".

At the time, Hugh McColl, BankAmerica's chief executive, said that if Microsoft gained control of the banking infrastructure "that makes commodities of all banks".

William Fenimore, Integrion's chief executive, said yesterday the new structure had been designed "specifically to be flexible and responsive to the needs of our customer banks".

He added that electronic bill presentment - the ability to present customers with bills online, so that they can be paid with one mouse-click - remained the "primary focus" of the company.

Electronic banking has developed much more slowly than other "e-commerce" activities, such as retailing and stock-broking, and bill presentment is seen by many in the industry as the "killer application" which would persuade customers to use electronic banking services.

However, it is technically a much harder service to provide than broking or direct sales, as several separate transactions need to be made simultaneously to pay a bill by cheque.

Paul Loftus, IBM's general manager for e-banking, said the aim was to provide a service which would allow a bank's customers to use all the financial services applications they needed, having logged on only once. He said this would be the "distinguishing feature" of the Integrion project.

Mobil delays joint venture

By Raymond Colitt in Caracas

A $2bn petrochemical joint venture between Mobil Chemical of the US and Venezuela's Pequiven, a subsidiary of the state-owned oil company PDVSA, is on hold due to financing difficulties, according to an official at the Venezuelan company.

"The situation of the financial markets is not suitable and the project is being reviewed," said Enrique Torres, head of new developments at Pequiven.

The joint venture is seeking to raise between $1.4bn and $1.5bn in debt to finance the construction of a new $2bn olefins complex in eastern Venezuela.

However, "going to the markets now would mean paying twice the spread over Libor [the London inter-bank offered rate] that previous petrochemical projects in Venezuela have," Mr Torres said.

Bank loans, by comparison, were too costly and had a maximum maturity of 15 years, compared with the 20-plus year maturity on capital markets, he added.

Mr Torres insisted that the project had not been cancelled. "We are tying up loose ends and looking for an opportunity to go to the markets," he said.

Mobil Chemical confirmed that it was "reworking the project schedule, which includes financing". It said the start of the project had been put back from 2002 to 2003.

An international joint venture including Pequiven last year raised $250m in bonds with a maturity in 2020, as well as a syndicated loan for the remaining $560m, for a fertiliser complex in north-eastern Venezuela.

Cummins sees earnings rise

Shares in Cummins Engine jumped 5 per cent in early New York trading after the world's largest maker of diesel engines above 200 horsepower said it expected first-quarter earnings of about 63 cents a share, which would top Wall Street expectations by 5 cents, agencies report from Chicago.

"Our expected first-quarter earnings will reflect a modest but important step towards improving profitability after a year of peak expenses associated with the introduction of our new products, which are already giving us a comparative advantage around the world," said Jim Henderson, chairman and chief executive.

Analysts had lowered their earnings projections as recently as Monday, according to First Call, a research group that tracks such estimates. The current consensus earnings estimate for Cummins was 58 cents a share, down from an earlier projection of 60 cents, First Call said.

Cummins earned $7m, or 18 cents a share, on $1.5bn in sales, for the first quarter of 1998. The earnings include a charge of 78 cents a share. Excluding the charge, the company earned $37m, or 96 cents a diluted share. For the second quarter, the company earned $53m, or $1.38, on $1.64bn in sales.

"We expect improved earnings in the second quarter as our revenues increase in line with seasonal upturns in our North American markets, and our cost reduction efforts continue to build momentum," Mr Henderson said yesterday.

By mid-day yesterday Cummins Engine shares were $1 13/16 higher at $39 7/16.

Xerox names new chief executive

By Paul Taylor

Rick Thoman is taking over from Paul Allaire as chief executive of Xerox, the US-based technology group. Mr Allaire, aged 60, who is credited with the successful restructuring of the old Xerox business, will remain chairman for about another year.

Mr Thoman, who is 54, is a former senior executive at International Business Machines. He joined Xerox as president and chief operating officer and heir apparent to the chief executive's job almost two years ago.

He said he intended to "drive ahead as fast as we can" with what he described as "the four dimensions of change" at Xerox – the switch from analog to digital technologies, the continued adoption of colour technologies, the interconnection of digital products and the delivery of customer-based services based upon these technologies.

Ten years from now, he said, he expected Xerox to derive half its revenues from out-sourcing and other services and half from hardware products.

Mr Thoman joined Xerox in June 1997 from IBM where he was senior vice-president and general manager of IBM's personal systems group, and later IBM's chief financial officer.

Before joining IBM in 1994, he was president and chief executive of Nabisco International, beginning in 1992. Before that, he was president and CEO of American Express International and chairman and co-chief executive of American Express Travel Related Services Company. He joined American Express in 1979 after being a senior associate with McKinsey and Company.

Meanwhile, two executive vice presidents, William Buehler and Barry Romeril, were elected to the board and named to the newly created position of vice-chairman of the board. Mr Buehler is also president of Industry Solutions Operations for Xerox and Mr Romeril is also the company's chief financial officer.

TELECOM ITALIA

TO ALL STOCKHOLDERS OF TELECOM ITALIA

TELECOM ITALIA'S PLAN DELIVERS GREATER VALUE TO SHAREHOLDERS

- This weekend, Telecom Italia's shareholders have the opportunity to make an important decision for the future of Telecom Italia.
- At the Shareholders' Meeting, we are seeking shareholder approval for our industrial plan for a growing Telecom Italia.
- Our industrial plan will integrate Telecom Italia with TIM to create a world class customer oriented business.
- Our industrial plan allows you to capture the unparalleled growth potential for telecommunications:
  - Telecom Italia Internet customers-growth of over 35% in last 3 months alone
  - Over 15 million TIM customers, including over 800,000 new customers added in first 3 months of 1999
  - Rapid expansion in data transmission
  - Captures all of the benefits of fixed and mobile integration.
- Our financial plan supports the industrial plan and will give shareholders:
  - An immediate on-market share repurchase programme of up to €10bn in cash
  - Cash for ordinary shareholders through the issuance and trading of conversion rights
  - Simple capital structure with one class of shares
  - Further integration with the higher growth business-TIM.
- Our plan allows ordinary and savings shareholders to realise the value created from Telecom Italia's assets.
- We are working for all shareholders. Keep 100% of the upside - Do not give it away to Olivetti - Tecnost.

TELECOM ITALIA IS WORTH MUCH MORE THAN OLIVETTI'S PROPOSAL.

ORDINARY SHAREHOLDERS' MEETING
Ordinary and Extraordinary sessions to be held in Turin,
at Centro Fiere, Pavilion 1 294, Via Nizza, Lingotto, at 10.00 a.m.
on the following days:

- April 9, 1999, the first call for the ordinary and extraordinary meetings
- April 10, 1999, the second call for the ordinary and extraordinary meetings
- April 11, 1999, the third call for the ordinary and extraordinary meetings

For further information please call toll-free:
167-020220 from Italy
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NEWS DIGEST

BANKING

Dutch pension funds refuse to raise NIB offer

Shares in the Dutch National Investment Bank (NIB) remained above the offer price yesterday as ABP and PGGM, the country's two biggest pension funds, opened a Fl 4.1bn (€1.86bn, $1.99) joint bid for the state-controlled industrial finance vehicle. In announcing details of the agreed takeover last Thursday, they refused to increase the price beyond the level they indicated when the deal was first unveiled last December. The tradable A shares in NIB eased 50 cents in Amsterdam to close at €30.80, ahead of the €29.95 being offered by the two institutions. Although there is only a small free float in the stock, it has changed hands above that level since the beginning of March. That indicates a belief in the market that financial groups such as ING, which owns 20 per cent of the bank, have been holding out for a higher price. ING – whose chairman, Godfried van der Lugt, has a non-executive board role at NIB – is the largest shareholder after the Dutch government. The state owns 35 per cent of the A shares and exerts control through other classes of equity. **Gordon Cramb, Amsterdam**

FRANCE

Arnault raises Bouygues stake

Bernard Arnault, the French luxury goods executive locked in battle with rival François Pinault over the future of Gucci, the Italian fashion house, has increased his stake in Bouygues, the construction and communications group in which Mr Pinault is a leading shareholder. It was announced yesterday that the Arnault group held 6.3 per cent of Bouygues' capital as of April 1, up from the 4 per cent the LVMH chairman was said to have when his interest in the construction group was disclosed last month. The LVMH camp said at the time that those shares had been held for several weeks and that the investment had been made because Bouygues shares were felt to have good potential to appreciate in value. Bouygues shares yesterday closed down 2.74 per cent at €244.4. **David Owen, Paris**

CZECH REPUBLIC

Unisys settles dispute

Unisys, the US technology group, and Ceska Sporitelna, the main Czech retail bank, have reached a settlement in their four-year dispute over a $100m online information system contract. Ceska Sporitelna pulled out of the 1992 contract in 1995 claiming Unisys was unable to implement it satisfactorily and sued for more than $100m, alleging that the US company had fraudulently misrepresented its system. Unisys counter-sued for breach of contract. Unisys failed in a petition before the US Supreme Court to have the case arbitrated in Vienna, as the contract with its subsidiary had specified, and the dispute was about to be heard in the US federal district court in the company's home state of Pennsylvania where damages could have been more substantial. Ceska Sporitelna still does not have an online information system for its savings books – which number more than the country's population – and is rapidly losing market share. **Robert Anderson, Prague**

Olivetti details Telecom Italia terms

By Paul Betts in Milan

Olivetti yesterday set a floor of 35 per cent on the minimum stake it will accept in Telecom Italia and said it would withdraw its €60.4bn ($65.2bn) hostile bid if Telecom Italia shareholders approved later this week the conversion of non voting savings shares into common voting stock.

Roberto Colaninno, Olivetti's chief executive, also said he would drop the offer should Telecom Italia shareholders vote in favour of the company's proposal to launch a €22.9bn cash bid for the 40 per cent stake in its Telecom Italia Mobile (TIM) cellular telephone subsidiary it does not already own.

Mr Colaninno spelt out the conditions of Olivetti's bid during a shareholders meeting of Tecnost, the 97 per cent owned subsidiary Olivetti is using as the vehicle for its bid.

The meeting, called to approve a record €12bn capital increase for Tecnost designed to finance part of Olivetti's €11.5 a share offer in cash, bonds and equity for all Telecom Italia common voting stock, was the first of a series of decisive shareholder meetings this week.

Olivetti will today hold another shareholders meeting to approve its own capital increase of up to €2.7bn. On Saturday, it will be the turn of Telecom Italia shareholders to vote on the defence strategy proposed by the company's management to fend off Olivetti.

The defence plan includes a large share buy back and the conversion of savings shares into common voting stock. Telecom Italia will subsequently hold another shareholders meeting at the end of this month to approve its proposed cash bid for the rest of TIM.

Mr Colaninno yesterday indicated Olivetti's bid would not be affected by the proposed Telecom Italia share buy back but by the proposed conversion of savings shares.

In a four-page letter sent out yesterday to woo Telecom Italia shareholders and institutional investors, Mr Colaninno claimed the conversion scheme was designed "to increase the number of Telecom Italia ordinary shares and therefore make a purchase of the company more expensive, or even unfeasible".

He also attacked his prey's proposed cash offer for the minorities in TIM arguing "the ability of any buyer to acquire Telecom Italia would be greatly reduced in the event that these defensive measures are actually approved".

Consob, the Italian stock exchange regulator, asked Olivetti at the end of last week to clarify the conditions under which it would withdraw its offer.

Merged German bank sees its image dented

After property losses and board splits, HypoVereinsbank may be short of time to put things right, writes **Uta Harnischfeger**

When the supervisory board chairman of Bayerische HypoVereinsbank resigned in mid-March, he took personal responsibility for the bank's property losses and wanted to signal a new beginning. Instead, he opened a can of worms.

Ever since, there have been growing calls for the supervisory board's most prominent member, Eberhard Martini, to resign as well. But Mr Martini, the former head of Bayerische Hypotheken- und Wechselbank – its property exposure is at the core of the merged bank's problems – is not considering such a step, and this is highlighting the bank's troubled image.

Once considered the new face of Germany's banking sector, the company resulting from the country's largest postwar banking merger is also running out of time to restore its reputation for caution.

Following revelations of massive property losses in October, subsequent verbal tussles between the two banks' former chairmen, as well as legal investigations and office searches, industry observers say the bank must act fast if it wants to dig itself out of its hole.

They demand a settlement of management differences, the appointment of a more prominent official in charge of handling the troubled property portfolio, and detailed exposure of the bank's past property deals.

Two weeks ago, the bank went some way to addressing these concerns by agreeing to employ an independent auditor to pin down property exposure. The auditor would also re-examine the share swap ratio used to determine the shape of the alliance when the two Bavarian banks merged in 1997.

Although both banks have used auditors before to determine their book values and the share swap ratio, this time a single auditor will look into both parties' books, particularly their property exposure. "This time, we want to see all the details," said James Hyde, London-based analyst at Merrill Lynch.

Previous audits did not dig deep enough into the books and failed to spot the real extent of Hypo Bank's property exposure, analysts say.

Analysts and investors are demanding details on Hypobank's three main property activities. These are, first, 52 commercial property projects spread across Germany which have fallen in value since the original investments in the early 1990s; second, troubled property financing schemes offered by Hypobank through external brokers; third, property funds offered by Hypobank with guaranteed yields that failed to materialise.

It was only a year into the merger that Bayerische Vereinsbank discovered the extent of Hypobank's property losses. Albrecht Schmidt, the chairman – "deeply shocked and bitterly disappointed" about its partner's handling of the property question – told surprised investors in October that the merged bank would have to take DM3.5bn (€1.79bn, $1.92bn) in risk provisions for Hypobank's property schemes.

The charges covered 52 commercial real-estate projects that Hypobank had financed after the fall of the Berlin Wall in the hope – proved false – that German unification would spark a property boom.

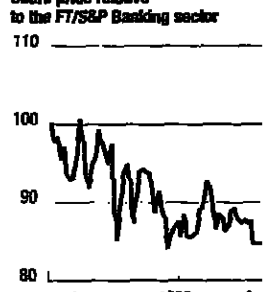
Since then, HypoVereinsbank has taken an additional DM700m in risk provisions to cover possible claims against its external financing schemes and another DM200m to assure the yields for Hypobank's property fund customers.

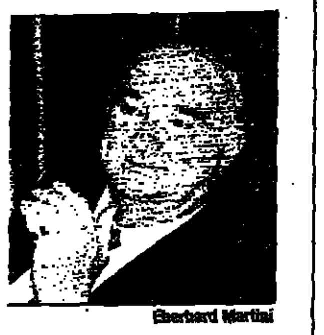
But there is an even more urgent question for former Vereinsbank shareholders. If the value of Hypobank's properties was massively overstated at the time of the merger, Vereinsbank shareholders believe they should receive due compensation. Yet while Mr Schmidt recently said it was "hypothetically possible" that an independent auditor could declare faulty the share swap ratio applied in September 1997, German law does not allow for shareholders to be compensated after mergers are finalised.

Merging the two former banks' management styles – epitomised by Mr Schmidt and Mr Martini – also needs urgent attention. "It is very bad to display to the public a split in the board," said Matthew Czepliewicz, analyst at Salomon Smith Barney in London. "The market expects a major European company to present a more unified picture."

HypoVereinsbank

Share price relative to the FT/S&P Banking sector



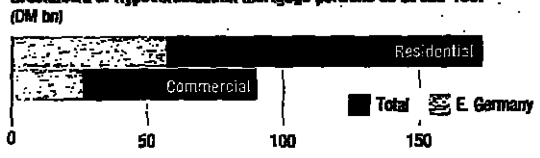


Eberhard Martini

Exposure to German property developers (DM bn)

	Exposure	Shareholders' funds, 1998*	Exposure as a % of shareholders' funds
Deutsche	3.5	33.4	10
Dresdner	1.5	19.2	8
Commerzbank	1.2	18.5	6
HypoVereinsbank	11.3	23.3	48
BHF-Bank	0.1	3.4	3

Breakdown of HypoVereinsbank mortgage portfolio as at end-1997 (DM bn)



Source: Datastream/ICV; company data; J P Morgan estimates * estimate

O.tel.o to retain own brand

By Ralph Atkins in Bonn

Mannesmann, the Düsseldorf-based industrial conglomerate, is to broaden its attack on Germany's telecommunications market by operating the o.tel.o fixed-line business it acquired for DM2.25bn (€1.15bn, $1.24bn) last week as a separately branded operation.

Shares in Mannesmann jumped €5.80 to €130 yesterday on the first full day's trading following the group's unexpected swoop to acquire the o.tel.o network from the Veba and RWE energy-based conglomerates.

O.tel.o will be added to the Mannesmann Arcor fixed line business.

The takeover is the first significant consolidation in the highly-competitive German telecoms market since its liberalisation at the start of last year.

Mannesmann said the deal, still subject to regulatory approval, cemented its position as the "strongest alternative" to Deutsche Telekom, the partially-privatised telecoms giant.

It added to the pressure on Mobilcom, the rival telecoms group that has grown rapidly largely by renting networks from Deutsche Telekom and had also attempted to buy o.tel.o. Mobilcom's shares ended down €29 at €211.

Although o.tel.o had invested heavily in infrastructure it made an unsuccessful launch last year after failing initially to allow customers use of its network without the fuss of pre-registering.

But Harald Stöber, chairman of Mannesmann Arcor, said yesterday o.tel.o would remain a separate identity under its new owner, including its different price structures and a headquarters in Cologne.

Despite substantial overlaps, o.tel.o and Arcor could be pitched at different customer groups "with much greater precision", Mr Stöber said.

With more than 50 regional and national telecoms operators in Germany, Mannesmann's "two brand" strategy would mimic multi-branding strategies in consumer goods markets.

Mannesmann said o.tel.o would be hit by restructuring costs this year but Arcor's results would "improve clearly".

Together, Arcor and o.tel.o are expected to make a profit in 2001. Mannesmann is also aiming to build its stakes in Omnitel and Infostrada, the Italian mobile and fixed line groups. It has not ruled out a capital increase to fund its telecoms expansion.

The sale of the o.tel.o fixed-network business leaves Veba and RWE more clearly focused on the European energy sector, in which either may now seek acquisitions.

However, at the weekend Veba said it remained committed to the mobile telephone market.

The groups' 60.25 per cent stake in the E-Plus mobile business was not affected by the o.tel.o deal and could be increased. Veba also has a stake in Bouygues, the French mobile telecoms group.

Court delays takeover moves by three banks

By Samer Iskandar in Paris

The outcome of the takeover battle between France's three largest listed banks is unlikely to be known before the end of June, a month later than anticipated.

The delay emerged yesterday, when a Paris appeals court said it would hear a complaint by Paribas and Société Générale on June 1.

The two banks are challenging a decision by the Conseil des Marche's Financiers, the financial markets regulator, to allow Banque Nationale de Paris to bid for them.

BNP's unsolicited twin bids, announced on March 9, threaten a friendly merger agreed a month earlier between SG and Paribas. The board of SG last night rejected BNP's offer, with only one director – Claude Bebéar, chairman of the insurer Axa – voting in favour.

Directors of Paribas meeting later in the evening were also expected to reject BNP.

Speculation was last night also intensifying that a counter-attack by SG and Paribas may be imminent. Analysts say SG might be tempted to improve its offer for Paribas by returning cash to shareholders in the form of a one-off special dividend.

The two banks recently said their proposed merger would free €6bn ($6.4bn) of excess capital.

The cash could also be used to guarantee future returns to investors, a practice that has been used successfully in France.

In recent weeks, 150 senior managers at SG wrote an open letter to Jean-Claude Trichet, governor of the French central bank, explaining why they opposed BNP's hostile attack.

SG also said 15,000 of its employees – more than a third of its France-based staff – had signed another petition against the takeover proposed by BNP.

The CMF, which sets the timetable for takeover bids, yesterday said BNP's offers would run for at least eight business days after the court's ruling, which is expected by the middle of June at the earliest.

According to French financial regulations, BNP's offers were scheduled to run for 25 business days starting next week, which would have resulted in the outcome being known around the end of next month.

However, the CMF had warned that its timetable might have to be adjusted, due to the unprecedented complexity of the deals proposed to investors.

The three offers – SG's bid for Paribas and BNP's separate offers for SG and Paribas – will run in parallel.

O.tel.o to retain own brand

COMPANIES & FINANCE: ASIA-PACIFIC

SOUTH KOREA NEW FIGURES RAISE CONCERNS OVER CHAEBOLS' COMMITMENT TO CORPORATE RESTRUCTURING

Top five conglomerates' debt burden soars

By John Burton in Seoul

The debt burden for South Korea's top five conglomerates, or chaebol, grew by 5.9 per cent to Won234,500bn ($119bn) last year, raising concerns about their commitment to corporate restructuring in response to the nation's recent financial crisis.

Daewoo and Hyundai, the two largest chaebol, were mainly responsible for the increase, with Daewoo's debt soaring by 40 per cent to Won59,872bn and that for Hyundai by 17.5 per cent to Won72,532bn, according to the Fair Trade Commission.

The new figures increase doubts about whether the leading chaebol will be able to meet a government target of reducing their debt/equity ratio to 200 per cent by the end of the year in a move to trim their sprawling industrial empires.

The FTC said the average debt/equity ratio for the top five chaebol, which also includes the Samsung, LG and SK groups, had fallen to 385 per cent last year, but this was due mainly to capital increases and re-evaluating assets instead of business disposals as desired by the government.

The government recently warned that it would disallow asset re-evaluations in calculating the chaebol's debt/equity ratio, which forced Daewoo and Hyundai last week to re-submit new restructuring plans to creditor banks.

Analysts estimate the debt ratio for Hyundai would rise to 600 per cent and that for Daewoo to 500 per cent if asset re-evaluations are excluded, raising questions about their financial stability.

Excessive and unsound investments by the top five chaebol were a main cause for the financial crisis, according to a recent study by the Korea Development Institute. It said the chaebol based their decisions "in anticipation of a financial rescue from the government" if the investments went sour.

It is uncertain what action the government will take if the chaebol fail to meet the debt reduction target, although it is possible that creditor banks might be forced to suspend new lending.

Nissan does sums with many parts

The Renault deal will mean consolidation for suppliers, writes **Alexandra Harney**

After all the flower arrangements and tea cups were put away, the ash trays emptied and the television crews dismissed, Yoshikazu Hanawa, Nissan president, began the company's own clean-up campaign last weekend.

Less than 24 hours after signing a strategic alliance with Renault to give the French carmaker a controlling stake in the company, Mr Hanawa called executives from Nissan's top parts suppliers to company headquarters in Tokyo.

His message was simple: lower your cost structures or risk losing our business. The meetings sent a shiver through the ranks of Nissan's parts makers, Japan's largest automotive *keiretsu* (industrial grouping).

The alliance with Renault is likely to force Nissan to unravel cosy industrial ties built up over the past 50 years and stimulate a fundamental consolidation of Japan's fragmented parts industry.

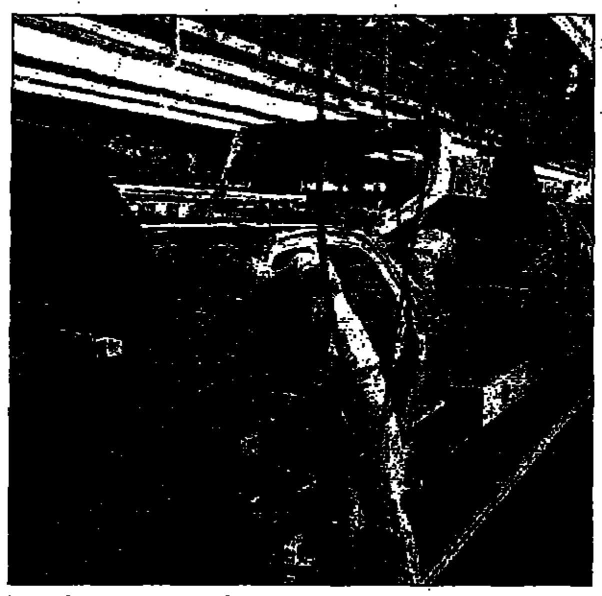
"The Nissan *keiretsu* as we knew it in the past is dead. The Nissan *keiretsu* two years from now is not going to bear any resemblance to what we see today," warns Stephen Usher, analyst at Jardine Fleming Securities.

Nissan, emboldened by Renault's own restructuring, expects to squeeze one-third of the $3.3bn worth of synergy gains expected by 2002 from its parts makers. This is likely to mean another round of price cuts for its leading suppliers, including companies such as Calsonic, Kansei, and Unisia JECS. These groups, in turn, will press their smaller suppliers to cut prices.

For financially-strapped parts makers, this is just the latest bad news.As they build more plants overseas, Japanese carmakers are relying more heavily on US and European parts makers. US companies sold a record $13.3bn to Japanese carmakers in the first half of fiscal 1998, up 15.7 per cent on the previous year, according to the Japan Automobile Manufacturers Association. Industry officials predict that this trend is likely to continue.

At the same time, car and truck sales, particularly at Nissan, have tumbled to their lowest levels in more than a decade. Suppliers responded by slashing costs and trimming their workforces with remarkable speed.

The push for consolidation has provided a window of opportunity for foreign parts makers and domestic carmakers. Robert Bosch, the German parts group, became the first company to take majority control of a Japanese parts maker when it bought 50 per cent of Zexel, a diesel engine pump manufacturer, earlier this year.



Nissan's clean-up campaign is set to bring many changes AP

Gary Hexter, chief financial officer of Mazda, said recently he expected to weed out some of the group's 500 local suppliers. Nissan, as part of its restructuring, is already selling shares in components makers including Ikeda Bussan, Unisia JECS, and an automotive seal manufacturer called Kinugawa Rubber Industries.

Kosei Minami, Nissan vice-president, said the merger with Renault was aimed at strengthening the groups against their European rivals.

In order to supply Renault and Nissan globally, Japanese suppliers will need to beef up production capacity overseas and develop value-added technologies – particularly highly efficient low emissions, and computer controlled systems.

The challenge is doubly great because demands for lower costs and more sophisticated components come at a time when profitability is in the doldrums. For example, Calsonic, a climate system, radiator, and muffler manufacturer, saw pre-tax profits tumble 14 per cent to Y9.79bn ($80.2m) in the year to March 1998.

Peter Boardman, analyst at Warburg Dillon Read, said "only a handful" of Nissan's suppliers, including Calsonic and Unisia JECS, were internationally competitive.

These companies, along with efficient parts makers such as Denso, see Mr Hanawa's clean-up campaign and the alliance with Renault as an opportunity to drum up new business. However, industry executives agree that consolidation will not happen overnight.

"It isn't as though we're making bread - our business requires testing and manufacturing. It will take some time," said one executive.

Haier to raise $200m from overseas listing

By James Harding in Shanghai

Qingdao Haier, China's leading home appliance maker, is looking to raise $200m from an overseas listing, in a share issue likely to test international sentiment towards a leading Chinese company.

Waning investor confidence in China's economy and concerns about the outlook for Chinese businesses have forced enterprises to abandon recent proposed share listings.

The first two initial public offerings of mainland companies destined for the Hong Kong stock market this year – Heilongjiang Agriculture and Shandong International Power Development – have fallen through, with the companies citing volatile market conditions. Other companies have delayed their plans for a market debut.

Haier said its proposals for an international share offering had been approved by the China Securities Regulatory Commission, the market regulator. But the details of an issue "worth around $200m" were still under discussion.

The company is understood to have abandoned its earlier intention to list shares on China's B share market – the depressed and illiquid domestic stock market for foreign investors. The move underlines how Chinese companies, much like international share-buyers, have given up on the B share market, which has been in steady decline for well over a year.

Haier has not decided where the shares will be issued, although it is understood to be looking closely at the possibility of a Hong Kong listing. The company has been given CSRC approval to list its "white home appliance" assets – plants making refrigerators, washing machines and air conditioners – according to officials. Haier is in the process of recruiting a foreign underwriter, and although it gave no timetable, the offer is expected to begin before the end of the year.

Over the past five years, Haier has emerged as one of the most competitive domestic appliance manufacturers in China, beating back competition from some of the best known US and Japanese brands to recapture market share. Haier Group achieved a 50 per cent increase in sales last year to about Rmb16bn ($1.9bn), according to official media, which have not given earnings figures.

Haier is now also understood to be working on the launch of an online shopping mall for China. The service is intended to make more domestic products available to Chinese internet users and boost the development of e-commerce in China.

NEWS DIGEST

AIRLINES

Tycoon commits to fresh $200m investment in PAL

Lucio Tan, the Filipino-Chinese business tycoon, has agreed to provide a fresh capital injection of $200m into Philippine Airlines if no other investor can be found to help support the ailing national carrier.

The move follows recent speculation about the commitment of Mr Tan, the majority shareholder in PAL, to the airline's proposed revival plan which is under review by the Philippine Securities and Exchange Commission.

Under the plan, receivers to the airline are seeking a restructuring of the airline's $2bn debt burden and fresh capital injection of $200m which will eventually make up 90 per cent of the equity in PAL.

There had been much speculation in the local press that Mr Tan could be seeking to build a stake in a rival domestic airline, Air Philippines, which is reportedly seeking a restructuring of debt owed to Allied Bank, an institution controlled by the Filipino-Chinese businessman. Sources in PAL have also indicated that there has been conflict between Mr Tan and a group of executives recruited from Cathay Pacific to oversee the revival of PAL.

However, Mr Tan, once of the closest allies of the late dictator Ferdinand Marcos, has given a commitment to government officials to back PAL if no fresh investor can be found by a June 4 deadline.

"He (Tan) is going to try and secure the $200m. He has to produce it. . . Essentially, he made the commitment that he will produce it if he is not able to get an investor," Ronaldo Zamora, the Philippine executive secretary told local reporters.

The commitment is likely to smooth the passing of the revival plan for PAL by the SEC which is expected to rule on it by April 15. The SEC has recently indicated the lack of definite information about fresh investors could be an obstacle in approving the plan.

Tony Tassell, Manila

SECURITIES

China's regulator issues ban

China's stock market regulator has banned eight securities companies from providing consulting services for three years as punishment for conducting what it deemed "unauthorised operations".

Among the companies penalised for irregular business practices is one of the provincial offices of China Guotai Securities, one of China's largest stock brokerages. The ban on Guotai's Zhengzhou branch does not affect the operations of the company's many other branches, but it is the second embarrassment for the flagship Chinese brokerage in the last six months.

Late last year, Hongguang Industrial, a provincial electronics manufacturer based in Sichuan, was discovered to have secured a stock market listing by claiming to be profitable, when it was in fact making substantial losses. Guotai had promoted the original share issue and, after the violations at Hongguang came to light, the authorities also reprimanded Guotai.

The Shanghai Securities News, the official newspaper, said yesterday that the China Securities Regulatory Commission (CSRC) had also banned 14 individuals from the securities consultancy business for three years for acting without regulatory approval.

China enacted rules governing securities consulting a year ago, ordering all organisations and individuals to obtain approval from the CSRC.

James Harding, Shanghai

MEDIA $2.1BN DEAL MAKES US GROUP SECOND-BIGGEST SHAREHOLDER AND GIVES MURDOCH COMPANY CONTROL OVER FOX

Liberty to take 8% stake in News Corp

By Gwen Robinson in Sydney

Shares in News Corp surged 12 per cent in Sydney yesterday after the company announced that Liberty Media of the US would acquire about 8 per cent of Rupert Murdoch's global media group.

In a two-step deal worth US$2.1bn, News is to buy "substantially all" of Liberty Media's 50 per cent interest in the Fox/Liberty Networks partnership. Liberty Media is controlled by AT&T. The Fox/Liberty venture includes regional sports programmer Fox Sports Net, a cable entertainment channel and related assets.

In exchange, Liberty will receive about 51.8m non-voting American Depositary Receipts valued at $1.43bn, and has agreed not to sell them for two years.

The deal would make Liberty the second largest shareholder in News with a stake of about 8 per cent, behind the Murdoch family with about 30 per cent. It would also end News Corp's troubled relationship with MCI, which has been marked by tensions over attempts to establish a US satellite broadcasting venture.

John Malone, Liberty chairman, described News as "one of the best managed and positioned global entertainment companies in the world".

Analysts said the fact Mr Malone was content to take non-voting stock in News rather than in Fox Entertainment, its 81-per cent owned film and television arm, showed "extremely high levels of confidence" in News, and the shares jumped A$1.38 at A$13.08.

Mr Murdoch said the agreement, which will give News full control of Fox/Liberty Networks, highlighted News's expansion in US cable television, particularly in sports and entertainment programming.

"This deal will enable us to leverage more fully the Fox brand across our cable and broadcast properties while giving us added flexibility over our sports and entertainment channels."

News Corp said that buying out Liberty's interest would better enable Fox Entertainment, its film and television arm, to pursue alliances and acquisitions "on its own timetable and at its sole discretion". Full control should also promote "additional synergies".

In a related deal, News said Prince Alwaleed Bin Talal, the Saudi Arabian investor, would also acquire 8m News Corp ADRs, adding to his existing stake of 5 per cent in News's non-voting shares acquired in 1997. Prince Alwaleed is a close business associate of Mr Murdoch.

News would also repurchase 56.3m non-voting ADRs from MCI WorldCom, which has held warrants over the News ADRs since 1995. News said subject to shareholder approval, it intended to repurchase the entire amount for about $1.39bn and then sell 28.1m of the ADRs to Liberty at the same price it bought them from MCI.

See Editorial Comment
See Lex

Nortel strategy convinces the doubters

Its move into data networking appears to be paying off, writes **Scott Morrison**

Investors and customers appear to be buying in to Nortel Networks' new strategic direction, despite initial doubts that the Canadian telephone equipment maker could transform itself into a next-generation networking company.

Nortel's shares tumbled last summer amid concerns over the company's expansion into data networking. And investor worries that the US$6.9bn acquisition of Bay Networks, the US maker of data networking equipment, would hit earnings, sent Nortel shares tumbling by about 60 per cent over five months.

But market sentiment has changed dramatically in the last half year. Analysts are encouraged that Nortel appears to be bridging the corporate culture gap, retaining key Bay staff and adopting Bay's quicker pace. Investors are so encouraged by Nortel's prospects that the company's share price has more than doubled in the past six months, nearing its 52-week high.

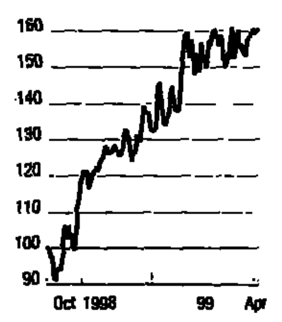
The turnround is evidence that investors, analysts and customers are moving to seize the technological high ground, says Benn Mikula, a vice-president and director at RBC Dominion Securities. "There is a clear sense that Nortel is beginning to be a player in defining how networks will be built, and how technology will be integrated into a vision of the future," he says.

Known until recently as Northern Telecom, a telephone equipment maker overshadowed by larger rivals in the US and Europe, the company stunned the industry last year by committing itself to the convergence between telecoms and data with its acquisition of Bay, which was losing ground to Cisco Systems, its larger datacom rival.

Much of the credit for Nortel's re-emergence goes to John Roth, the chief executive who issued an internal memo over a year ago announcing that Nortel would refocus on data communications. Observers say Nortel's move gave it a head-start in the race to become an equipment provider for the next generation.

In February, the company unveiled Succession Networks, technology that enables large telecoms carriers to overlay data networking capabilities on to their existing voice networks without having to scrap an estimated $1,000bn worth of investments in the current networks.

Nortel
Share price relative to the TSE 300 index



Source: Datastream/ICV

Nortel's technology, compatible with about 90 per cent of existing network architecture, could help large carriers to make the transition towards building multipurpose networks that enable them to provide customers seamlessly with voice, data, video, internet and wireless services. It is under evaluation by Southwestern Bell, France Telecom, and AT&T.

Lucent has unveiled similar technology, although it is not compatible with networks built by other equipment makers. Analysts say Cisco, Nortel's other US rival, lacks the voice networking background and the relationships needed to be a strong competitor in the large carrier segment. Nortel's European rivals, such as Siemens, Alcatel and Ericsson, are given little time to act if they are to remain industry forces.

Mr Roth has also hinted that his company could soon step on a few more toes by announcing an agreement to provide data networking equipment to a "major transnational carrier" in Europe.

But Nortel, like its rivals, faces several challenges. It must develop a more efficient method of transmitting data traffic across networks. Nortel is also trying to develop a more affordable way for carriers to move from circuit technology, used for voice traffic, to packet technology, which is more efficient for data.

A third challenge is to develop an integrated wireline and wireless internet enabling users to hold conversations, access voice-mail and scroll through data banks, as well as send and receive e-mail through a cordless phone, laptop computer or other device. Mr Roth says his company will probably make a few more small acquisitions to "fill some holes".

Maribel Lopez, an industry analyst at Forresters, says Cisco, Lucent and Nortel are most likely to develop the technology that will enable carriers to build next-generation networks.

Many industry analysts would argue that Nortel's inclusion in such a select group speaks volumes about Mr Roth's foresight.

Now he must demonstrate that the expectations are well founded.

John Roth: much credit for Nortel's re-emergence Lynn Farrell

KPMG made own offer to block poachers

By Jim Kelly in London

Arthur Andersen's attempt to poach the Canadian practice of rival "Big Five" firm KPMG collapsed after partners were made a generous alternative offer including an injection of up to C$300m (US$200m) into the pension fund, it emerged yesterday.

Spencer Lanthier, KPMG's Canadian chief executive, blamed the collapse of the Andersen deal on uncertainty caused by a dissident vice-chairman who won the backing of an Ontario court to delay the merger vote.

But it is understood that a KPMG counter-offer also played a part.

This was masterminded by Paul Reilly, chief executive of KPMG International and Steve Butler, chief executive of the US firm, who put together an alternative proposal to woo Canadian partners.

Many Canadian partners were already questioning the Andersen deal and are thought to have been unhappy with the way in which the firm's leadership had proceeded without wider consultation.

The loss of the Canadian practice would have seriously undermined KPMG International's attempts to build a single, globally integrated firm.

KPMG International declined to comment on the proposed deal while discussions continued in Toronto. But the deal on offer to KPMG Canada is understood to contain:

- An assurance that all Canadian partners will become partners in a new "Americas" firm. The Andersen offer would have left some outside the prestigious Andersen Worldwide.
- A corporate governance structure for the new "Americas" firm which would safeguard Canadian interests.
- An offer to equal Andersen's on income guarantees and tenure.
- An injection of up to C$300m into what KPMG admitted last week was an underfunded pension fund.
- An offer that infrastructure and support systems required by the Canadian firm to fit into the new "Americas" firm would be met by the US firm or KPMG International.
- That there would be "no reprisals" against KPMG management in Canada, which had masterminded the defection to Andersen.

Intel cuts bonuses after chip sales drop

Bonuses paid to senior executives at Intel, the world's largest semiconductor group, were cut substantially in 1998, a year in which worldwide chip sales suffered a big decline, Reuters reports from Washington.

Andrew Grove, chairman, saw his 1998 bonus fall to $1,926,800 from $2,790,400 in 1997, Intel reported in a proxy filed with the Securities and Exchange Commission. His base salary rose to $490,000 from $465,000.

Craig Barrett, chief executive and president, saw his bonus decline to $1,789,800 from $2,190,100 in 1997, while his salary rose to $454,200 from $365,000.

There was an average bonus decline of about $340,000 for Intel's three other most highly compensated executives: Gerhard Parker, executive vice-president and general manager of the New Business Group; Leslie Vadasz, director of corporate business development; and Paul Otellini, vice-president of the Architecture Business Group.

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PHARMACEUTICALS MERGER COMPLETED TO CREATE GROUP WITH £53BN MARKET CAPITALISATION

Investors support AstraZeneca link

By David Pilling in London and Nicholas George in Stockholm

Europe's biggest merger was completed yesterday after shareholders overwhelmingly approved the combination of Zeneca of the UK with Astra of Sweden to form one of the world's largest drugs companies.

AstraZeneca, which will have its headquarters in London, will be the fifth largest company in the UK, with a market capitalisation of about £53bn ($85bn), and will make up 4.3 per cent of the FTSE 100 index by value.

According to data from IMS Health, which measures prescription drug sales, the new group would have had a combined global market share of 4.3 per cent last year, narrowly pipping UK rival Glaxo Wellcome, as well as Novartis of Switzerland and Merck of the US, to the top slot.

The new company's immediate challenge will be to ride out the patent expiry of two important drugs, including Losec, Astra's anti-ulcer agent that achieved sales of $4.4bn last year. Losec, the best-selling drug ever, begins to lose its patents from 2002.

Tom McKillop, chief executive, said the company had 14 patents to protect Losec and generic products would have to cross a "legal minefield" to challenge it. He said data for perprazole, an ulcer drug the company claims is significantly better than Losec, would be available in the second half after it is filed for approval in the US "in the early summer".

The shares fell 91p to £29.46 yesterday, but analysts said this was a normal "technical correction" after a squeeze on the stock ahead of the deal's completion.

The company announced the first tier of 100 senior management appointments yesterday, which Dr McKillop said had been determined on merit and not through a UK-Swedish quota system. Several thousand jobs would be announced by June 1, he said.

As well as perprazole, the company had two strong cardiovascular products coming through as well as a promising anti-thrombin for blood clots. Proceeds from these products, as well as annual cost cuts of $1.1bn in three years, would protect post-Losec profits, he said.

The company would also seek to buy in at least one non-hospital drug from a biotechnology group.

Hakan Mogren, the resigning chief executive of Astra who becomes joint executive deputy chairman of AstraZeneca, said the most difficult part of the merger would be adapting the cultures of the two companies. He said management hoped to exceed the announced annual savings.

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Monument reveals approaches

By Thorold Barker

Monument Oil and Gas, the exploration and production company, yesterday revealed it had received preliminary approaches from a number of companies, believed to include Enterprise Oil and Lasmo.

The shares, which had risen from a 12-month low of 32¾p in January, jumped 5p to 47¾p, valuing the company at about £420m ($672m).

However, the company said no firm proposals had been put forward.

The announcement followed comments from Tony Craven-Walker, Monument chairman, at the final results last month, when he said the company was investigating possible deals to improve shareholder returns.

He stressed yesterday that a full offer for the company was one possibility, but there were also a number of attractive opportunities to pool assets with others or even to buy assets.

Monument has about £25m of cash and could raise a further £250m for acquisitions.

Lasmo and Enterprise Oil, whose talks to create a £3bn "super independent" collapsed last week, both refused to comment.

Analysts said the announcement put Monument in play. They said a buyer would probably have to pay more than 60p a share to take control.

Lasmo is regarded as the most likely bidder for Monument.

The operations of the two companies would overlap in Liverpool Bay where a combined business would control 45 per cent of the oil and gas field and have more influence with Broken Hill Proprietary, the Australian resources group which operates there.

Biotechnology venture formed

By Virginia Marsh and Richard Rivlin

Chris Evans (left) with Jeremy Curnock Cook Colin Beere

Two of the best-known names in UK biotechnology are coming together to form a venture that will invest in the sector around the world.

Chris Evans, the entrepreneur behind Toad, Chiroscience and other technology companies, and Jeremy Curnock Cook, head of the Rothschild Bioscience Unit (RBU), are to become executive chairman and chief executive respectively of Merlin Bioscience. The company, which will cover Europe, North America and Australia, will have one of the largest teams in the world dedicated to investing in biotechnology, and will run venture capital and investment management operations.

It will also assume the management contract for International Biotechnology Unit, the quoted fund run by Mr Curnock Cook's team at Rothschild.

Merlin Bioscience will be a merger of Merlin Ventures and key individuals from RBU, formed in 1981. Mr Curnock Cook, who has headed the unit since 1987 and is also an executive director of Rothschild Asset Management, will stay on at Rothschild until regulatory approval for the new company has been obtained, probably in the summer.

It will begin with about £150m ($241m) in funds under management but this is expected to rise to £250m following the formation of a second Merlin fund, announced last month, which hopes to to raise £100m mainly for later stage European bioscience investments.

Until now, Merlin had mainly concentrated on seed and early stage investments in Europe while RBU has tended to target later stage companies, around the world.

"Now, we will cover the whole waterfront from lab bench to late stage," said Mr Curnock Cook. "We also expect a considerable amount of consolidation in the sector in the next five years. Spanning three continents will help us identify such opportunities. In coming together ourselves, we are showing the way."

The move follows the announcement last month that merger talks between IBT and Biotechnology Investments Limited, an offshore investment company also managed by RBU, had failed.

Tie Rack agrees Italian offer

By Peggy Hollinger

Tie Rack, the specialist retailer born in the 1980s boom, yesterday agreed to a £22.6m ($36m) cash offer from one of its main suppliers, the family-owned scarf and necktie manufacturer, Frangi Investments of Italy.

Shareholders representing 42.6 per cent of the group have pledged to sell their holdings to Frangi, regardless of a higher offer. This includes Vadep, the Swiss trust which backed Tie Rack 17 years ago with a £600,000 investment. It will realise £8.3m, but has agreed to lend £1.97m to the new company that will run Tie Rack.

The deal, which pays investors 43½p a share against last week's closing price of 35p, brings to an end Tie Rack's turbulent 12 years as a listed company. It was one of the most expensive companies ever to come to the stock market when it listed just months before the crash of 1987 – at a multiple of 31.5 times earnings.

Over the past 13 years it has only risen above its 145p debut price for less than three years, although it has been one of the few niche retailers to have survived the recession. Most recently, it has fallen victim to the UK consumer slowdown and the financial crisis in south-east Asia. The company had been poised to announce 1998-99 losses of £7.5m.

Roy Bishko, Tie Rack's founder and chairman, and his management team will reinvest for a 20 per cent stake. Frangi will share the management of Tie Rack, appointing its international director, Simone Frangi as co-chairman with Mr Bishko. Mr Frangi said the plan was to revitalise Tie Rack by offering different products in its various markets. It operates 426 outlets in 30 countries. Robert Fleming is advising Frangi, with HSBC acting for Tie Rack.

RESULTS

		Turnover (£m)		Pre-tax profit (£m)		EPS (p)		Current payment (p)	Date of payment	Corresponding dividend	Total for year	Total last year
								Dividends				
Development Secs	Yr to Dec 31 ★	37.4	(30.9)	20	(12.4)	66.7	(42)	2.2	July 7	2	3.3	3
Dickie Heel Φ	Yr to Dec 31	10.2	(9.81)	0.217	(0.382)	1.84†	(2.76)	0.6	May 7	1.	1.2	1.6
Walker Greenbank	Yr to Jan 31 ★	74.4	(96.2)	33.1♥	(7.84♠)	36.92‡	(5.09)	2	July 6	2.4	2	3.7

Earnings shown basic. Dividends shown net. Figures in brackets are for corresponding period. ★Comparatives restated. ΦAim stock. ♠After exceptional charge. ♥After exceptional credit. †On increased capital. ‡On reduced capital.

C&W in UK cable talks with Telewest

By Christopher Price and Alan Cane in London and William Lewis in New York

Cable and Wireless confirmed yesterday it was considering a part-merger of its UK cable interests with Telewest Communications, respectively the first and second biggest cable groups in the country.

Both companies stressed that talks were preliminary, involving both the cable companies' large shareholders, as well as management. People close to the talks said the early and delicate state of them meant other options could be considered.

The statement said that "preliminary discussions" are being held between Cable and Wireless Communications, in which C&W holds 53 per cent, Telewest "and certain of their major shareholders concerning various corporate options."

These "may include, among other things, the transfer of various businesses of CWC and Telewest." The statement "emphasised that the current discussions are at an extremely early stage."

A tie-up between CWC and Telewest has long been rumoured in the cable industry, which has undergone rapid consolidation in the face of huge losses.

Under the plan being put forward by advisers to C&W, the telecoms group would take over CWC's corporate interests and hand its residential cable business over to Telewest. CWC, which is capitalised at more than £6bn ($9.7bn), would then be de-listed. Merrill Lynch and Credit Suisse First Boston, the investment banks, and Greenhill, a financial boutique, are involved in putting the plan together.

However, people familiar with the talks said there were still difficult discussions ahead between CWC's shareholders, and separately between Telewest's shareholders, and then between all the parties.

It is understood CWC shareholders would be offered Telewest shares. A stalling point could be the amount of dilution Telewest shareholders might be willing to accept. Telewest big shareholders include AT&T and MediaOne. CWC's other significant shareholder is Bell Atlantic, the US group, with 18 per cent.

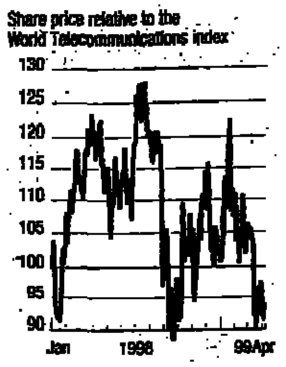
Any deal is likely to attract the attention of the competition authorities in London and Brussels.

CWC shares rose 36¼p to 754½p, C&W closed up 23¼p to 775½p and Telewest advanced 19p to 296½p.

COMMENT

Cable and Wireless

Cable and Wireless
Share price relative to the World Telecommunications index



Source: Datastream/ICV

Is there no let up in the whirlwind of deals surrounding Cable and Wireless? Under Graham Wallace, the new chief executive, the telecommunications group seems as hyperactive as when Dick deal-maker Brown was at the helm. Take the current list of mooted deals. In the UK, C&W is considering selling £10bn-odd of assets, including its mobile phone operator and cable television business. Overseas, there is talk of pooling its international network with that of its foreign subsidiaries. Mr Wallace will need stamina to deliver all these deals. But he is right to try. With C&W trading at a 40 per cent discount to the sum of its parts, something is wrong. Closing that discount requires C&W to be more focused. Hence the mooted UK deals – and the ongoing disposal of Bouygues Telecom in France.

Selling mobile interests in territories where they are not meshed with fixed-line businesses confers another advantage. It allows C&W to focus investment on its international telecommunications side. Although less glamorous, this offers juicy returns. Global data communications revenues are growing by 40 per cent a year. Through its far-flung international network, C&W has the scope to reach business customers in Europe, Asia and the US. The problem is this network is not unified. C&W's two listed subsidiaries – Hong Kong Telecom and Optus of Australia – are outside it. Meshing the bits together will be tricky. C&W could not buy HKT even if it wanted to. But if Mr Wallace could find a workable structure, shareholders might have reason to cheer.

Reed Elsevier

To get close to hooking a big fish of a chief executive, then to lose him *and* have to tell this to the market is painful stuff indeed. This is a terrible display of negotiating tactics on the part of Reed Elsevier. The Anglo-Dutch media group is left with egg on its face. Other candidates for the job will scent a management under intense pressure to sign someone up. And investors will be concerned that whoever ends up leading the company was not the company's top choice.

In terms of image, it does not get much worse. Furthermore, the rumpus over the recruitment has led two Reed Elsevier directors to resign. Any head-hunters out there looking for the challenge of their life?

Electra EGM to decide 3i bid

By Katharine Campbell

The outcome of 3i's hostile £1.25bn ($2bn) bid for Electra Investment Trust, its venture capital rival, will be decided at Electra's extraordinary general meeting next week.

3i said yesterday that it would withdraw its cash and paper bid, worth about 725p a share at last night's close, if Electra shareholders approved the trust's restructuring proposals. These include a tender offer for 40 per cent of the shares at 786p, followed by a sell-off of the assets over five years.

Electra, which has called its EGM for April 15, needs the support of 75 per cent of shareholders voting in person or by proxy.

3i's offer document had said that its bid was conditional on rejection of Electra's proposals. However, it also said it retained the option to waive that condition.

3i said yesterday that a "number of features", including proposals for enhanced remuneration of Electra managers, had dissuaded it from considering that alternative.

Analysts pointed out that if 3i proceeded after acceptance of the tender offer, it would need extra funding to cover the debt Electra would assume in order to finance it.

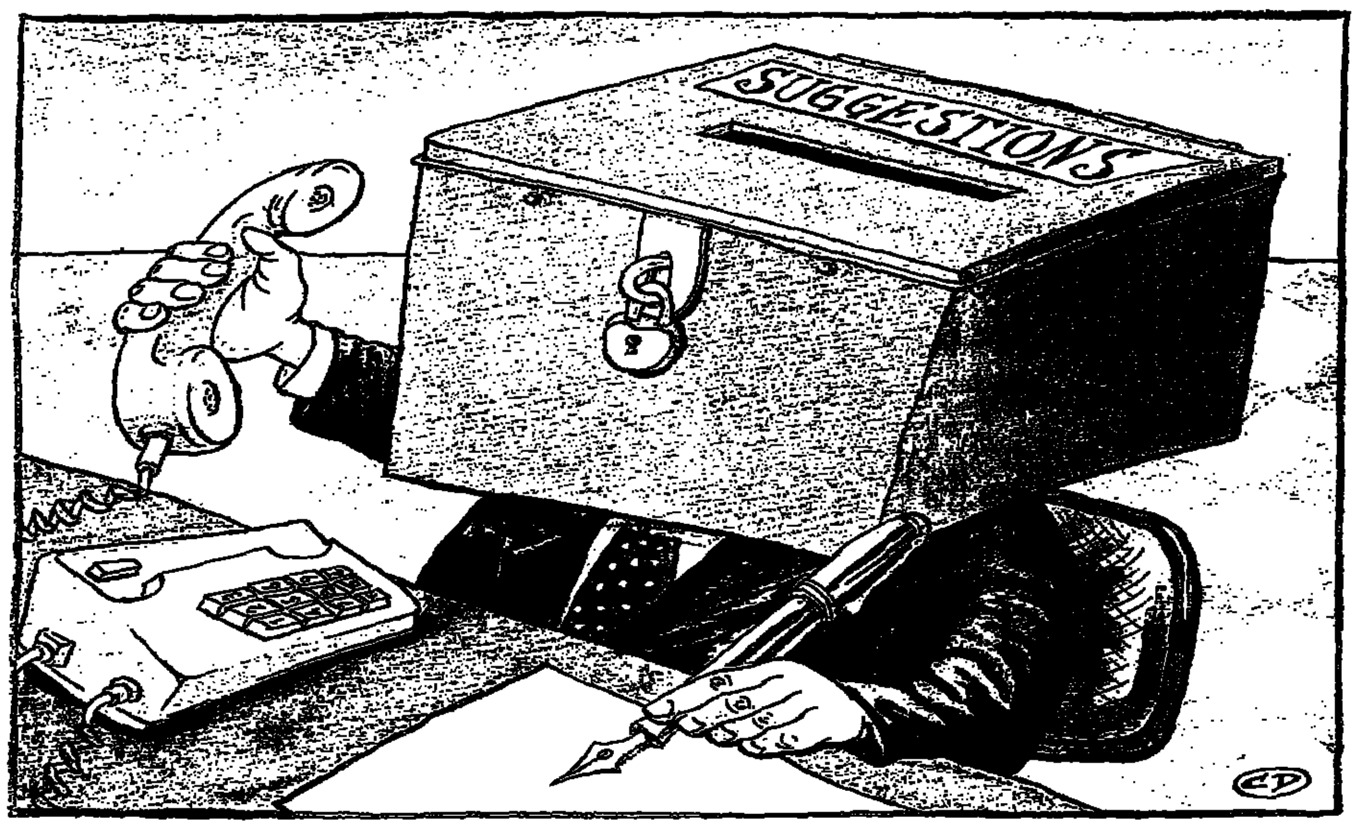
Electra shares eased 1p to 714p yesterday, while 3i's rose 1½p to 629p.

The first closing date for the bid is April 21.

MANAGEMENT INTERNAL COMMUNICATION

Workers on the suggestion line

US companies can swap a wooden box for a telephone service to collect bright ideas, says **Nikki Tait**



Three years ago, American Freightways, an Arkansas haulage company, had a little wooden "suggestions box". Its 13,300 staff dropped in about one offering a month.

But things have changed. It now has a contract with an outsourced, telephone-based employee feedback service – and receives 200 calls a month from its workforce.

Suggestions have ranged from how to maintain equipment to the best way to bid for work on certain routes. "All people have to do is pick up a phone – it has been very beneficial," says Mr John Sherman, vice-president for "people management".

The person behind In Touch is Peter Lilienthal, a Minneapolis businessman. The concept is simplicity itself, yet clients as varied as Pillsbury, Chase Manhattan, Arthur Andersen Consulting and Coca-Cola have nothing but praise.

In Touch provides a freecall number, which the client's employees can dial at any time. Messages are then transcribed – verbatim – and forwarded to the company's executives within one working day.

For companies with 5,000 employees or more, In Touch will provide a monthly breakdown of calls, highlighting areas of concern, and so on. It can also provide some foreign-language services – Spanish, for example.

It is successful, says Mr Lilienthal, partly because the service is independent and, unlike typical in-house systems, callers can remain anonymous.

The uses made of it vary considerably. Some chief executives have recorded a message on the freecall number about an issue to solicit opinion. The service has also been used to elicit employee commentary in particular circumstances: Rite Aid, the drug-store group, used it after a big acquisition to try to assess the issues of concern to its newly acquired workforce.

Most companies, though, leave their workers to volunteer the subject – with the result that calls range from personnel and organisational matters to suggested business improvements.

But what is to stop disgruntled staff abusing the service by reporting incorrect information, or trying to land a colleague in trouble? Worse, what if employees banded together to send a series of messages intended to mislead managers?

That, admits Mr Lilienthal, is a frequent worry among prospective customers – but one that usually proves unfounded. "Those kinds of calls are extremely rare. Believe it or not, employees by and large care about the companies they work for," he says.

Client companies tend to agree. At American Freightways, which introduced the service in 1997, Mr Sherman admits: "You will occasionally get someone who has a point they want to make and they will load the system." But, he says, the underlying issue is usually fairly easy to unearth and probably worth addressing anyway.

Karen Gustafson, head of employee communications at Pillsbury, the food company, says that where individuals are targeted for criticism, the company just "discreetly investigates".

Having watched tens of companies implement the system, Mr Lilienthal says it is almost impossible to predict what the response will be. But he notes that there is often a quiet interval at the outset, while employees wait to see whether messages will be taken seriously. That is followed by a period when minor, bottled-up grievances emerge. Finally, once the system is established, the number of calls typically falls away, and their value increases.

This, too, is confirmed by clients – although Pillsbury, which began using the service in the early 1990s, shortly after it was acquired by Britain's Grand Metropolitan, says it still receives about 50 calls a month.

Mr Lilienthal has a couple of tips for anyone introducing the system. First, make sure the service is relatively unrestricted, and not advertised as a "complaint" line. Second, convince workers that calls will be taken seriously. American Freightways, for example, promises to get back to all employees who leave their name within 10 days. Executives to whom the messages are forwarded are given five days to respond. Pillsbury makes a point of publicising the most relevant messages, together with responses, via its in-house newspaper or internal e-mail system.

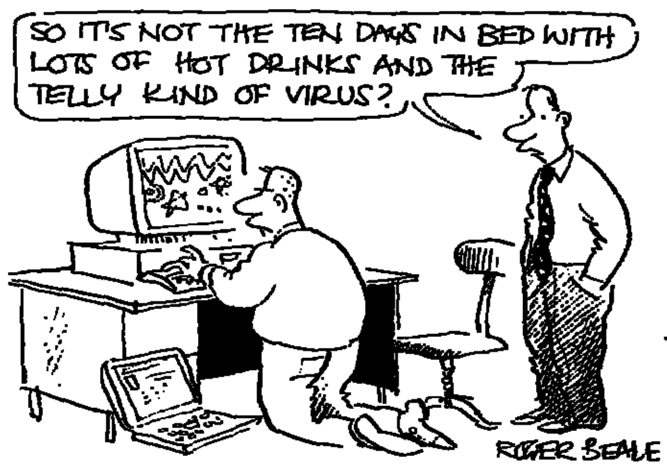
Perhaps the final benefit is that, as management tools go, this one is not particularly costly. In Touch charges a flat $3 per employee, so a company with 10,000 employees would pay around $30,000 a year.

As Mr Lilienthal puts it: "That's the sort of money some spend on the company picnic."

LOUISE KEHOE
IN SAN FRANCISCO
EAGLE EYE

Clippy faces his come-uppance

Ammunition is at hand for the army of PC users exasperated by Microsoft's onscreen assistant



Do you want to strangle Clippy? If so, you are not alone.

Clippy, formally known as the "Office Assistant", is the bug-eyed, paper-clip character who pops up on your computer screen every time you try to write a letter using Microsoft Word. Far from assisting, he is usually an annoying interruption.

Worse, Clippy makes PC users feel inadequate, forever popping up to ask if you need "help" – implying that you are incapable of producing a text document without instructions. Indeed, this incessantly cheery figure may well be responsible for much of the anti-Microsoft sentiment prevalent among computer users these days.

But help is at hand. ZDnet, one of the best high-tech news web sites, is running a "Kill Clippy" feature that offers ways to subdue the little tyrant, or if you are really serious, annihilate him.

For Kill Clippy instructions go to *www.zdnet.com/zdhelp.*

***

On the subject of irritating software, the Melissa virus has been creating lots of headaches.

It is always tempting to dismiss virus scares as the promotional efforts of anti-virus software sellers, but Melissa really is bad news. It signals the increased sophistication of viruses that pose serious computer security threats if they go unchecked.

Melissa, like several earlier "macro" viruses, is carried in a Microsoft Word document that is transmitted via e-mail and is activated when the document is opened.

However, in an ominous new development, Melissa then accesses files in another program: the Microsoft Outlook e-mail client software. The virus reads e-mail addresses from Outlook and replicates itself by sending the infected document to these people.

It is this ability to access data from other applications that has worried experts. Imagine the effects if confidential files were read by a virus and transmitted to unknown parties.

Analysts at Current Analysis, a US industry research group, suggest Melissa could just as easily have been programmed to access documents and send them to a predetermined address, rather than the e-mail list of the victim.

In this way viruses could be used as electronic "secret agents", snooping through computer files and transmitting them to competitors, enemies or even blackmailers, without the knowledge of their victims.

The good news is that Melissa was detected very quickly and antidotes were available within a few days. Less than two weeks after the virus got "into the wild" the epidemic now seems to be under control.

But Melissa has sounded a warning that no computer user can afford to ignore. Maintaining up-to-date virus protection is imperative, but as this new virus has demonstrated, that may not be sufficient.

But what else can an internet user do? Encrypting sensitive files may be a sensible precaution. Ask yourself what the costs would be if a file stored on your PC were to be "published" without your consent.

It might be a list of employees' salaries, or a private letter.

For businesses, maintaining corporate network security looks like consuming a much bigger slice of IT budgets.

***

Who owns you? Or to put it more precisely, who owns your digital identity?

On the internet, your digital identity , or "digitalme" as Novell calls it, is defined by information you share freely with web site operators as well as your web "habits" – web sites you "bookmark", those you visit most frequently, documents you choose to read and how long you spend reading them, as well as advertisements you respond to.

Together, this data creates a profile of great value to marketers. If you have visited several automobile web sites recently, the chances are high that you are interested in buying a new car. If you consistently read all the news about internet companies, you may well be an investor who uses online brokerage services.

But do you want to receive marketing material aimed at your digital identity, or would you prefer to keep your interests private? Putting that decision in the hands of the consumer is the goal of "digitalme".

Novell, the networking software company, is proposing a system that enables consumers to create "mecards" – trading cards that contain personal information. Users may choose to share these cards, in much the same way that business cards are exchanged, or they might prefer to withhold certain aspects of their digital identities.

This is a practical approach to the issue of internet privacy. Rather than assuming an adversarial relationship between businesses and consumers, as the European directive on digital privacy would imply, Novell is attempting to create a system that would enable consumers to share their personal information only when they choose to – perhaps because they are searching for a particular product.

Novell has built "digitalme" on its network directory technology, which was traditionally used to list all the users of a computer network. Creating lists of network users with matching attributes has become an important element of internet marketing.

The company will test its approach among consumers, businesses and software developers over the next few months.

With luck, technology may triumph over politics and enable a practical solution to the burning issue of personal privacy on the internet.

Share your views in the Eagle Eye discussion group on the FT web site (www.FT.com) or contact Louise Kehoe by e-mail on lkehoe@ix.netcom.com

JOHN W. HUNT
ADVISES

Schmooze your way to success

The importance of networking cannot be underestimated and although difficult, its skills can be learnt

Dear Professor Hunt,
I have just had my annual appraisal. For the third year in a row my boss has told me that I need to network, which is something I have never understood the point of, or the need for. In addition, I am rather shy and would in any case find this sort of activity particularly stressful. What is the point of networking, and if I am to implement my boss's advice effectively, is there anything I can do to make it easier for myself?

If you think about it, any organisation relies on the interaction of individuals to function. These interactions create networks.

Most theories about how these relationships are maintained refer to common objectives, shared values, rules, regulations, inter-dependencies. But while we speak about "the firm" or "the ministry" or "the United Nations" as though these are tight, cohesive units of co-operating individuals, they are, in fact, rather loosely networked social systems. Your firm is no exception.

What holds people together is shared expectations about how they should behave. These evolve in any mix of people and are essential to what we call civilised behaviour, whereby the shared interests of the collective are paramount. Some of these expectations are quite explicit and formally documented. Others are more implicit, but refer to quite specific behaviours such as how we treat each other.

Most of the time we are not conscious of these agreements until someone violates one of them. This is one reason hostile takeovers are so hurtful. Predator companies violate one of the unarticulated but fundamental codes of a civilised society: that adults do not attack each other's interests in a barbaric way.

What sustains these expectations are the networks of relationships among the people involved. Historically and statistically, the necessity to learn the more subtle rules of the game required interaction with no more than about 150 people. Companies were analysed as closed, or bounded, networks of a finite number of people.

Employee mobility and information technology have changed this picture. Traditional barriers to accessing networks – such as hierarchy, age, gender, education, nationality – have been eroded. We have all become entangled in multiple networks, each with its explicit and implicit codes of expected behaviours. Interactions between individuals may be conducted face to face, electronically, over the phone or in writing.

The consequences are daunting. But if you want to pursue a career within this infinite network, you have no choice other than to play the networking game.

Second, the power of formal networks to dominate the way we behave at work is weakening. Often the powerful expectations come from professional colleagues or clients or sub-contractors, to whom an individual often feels more committed than their current employer.

A third consequence is the change from servicing a few, stable networks based on face-to-face communication to maintaining many.

Fourth, many of these extended networks depend almost entirely on implicit agreements which many people find stressful. So, learning to network means learning to "wing it", to "schmooze", to tolerate uncertainty and ambiguity. And, unlike the traditional face-to-face relationships of inter-firm interaction, the consequence of ignoring the implicit agreements of these often remote relationships is unclear.

We do not need major research to know that the people who thrive in this world are social animals whose focus is "out there"; and the people who hate it are introverts whose focus is "in here".

Of course, some people refuse to participate in the networking game. They argue that active networking is the scourge of the mediocre; that insecure people network with other more impressive individuals to establish their identity; and that networkers mistake quantity of relationships for quality.

So, given that networking is important, how might you improve your skills? First, you need to accept that technology has transformed networks – so use the technology.

You can also develop your face-to-face networking by attending conferences, joining professional associations, and taking courses. The first public steps will be difficult. But boldness pays dividends. Walk up to a group and introduce yourself. Ask questions about them. If you see people who may be more interesting, excuse yourself and move on.

Remember, your objective is to make contacts, share experiences and information. Use your business cards, and ask for theirs. Follow up next day and try to keep open the relationships you find interesting.

If you wish to extend your links to unfamiliar networks, the process requires preparation. You need to identify significant people within the network. Write to a couple of these names and ask to see them. Take the initiative by suggesting in your letter that you will call them to set up a meeting. Avoid presenting yourself as an imposition. For example, say you are interested in their view of the industry instead of saying you are looking for a job.

Many may reject you and you might find yourself unable to set up a face-to-face meeting. But persist – you will crack it eventually.

When you do, ask them for two more names of people you should talk with to hear alternative views. These two names then become your next step in unravelling this network. Again, you secure a meeting. But this time it is easier because you write and, ideally, talk to your contact and tell them that Mr X, your first contract, suggested you talk to them. I have referred to this practice as skateboarding. The skill in networking is to ride on someone else's board.

None of this is easy, though. Every step forward you take, you will get the impression you are going back four. But, unlike some skills, networking can be learnt.

John W. Hunt is Professor of Organisational Behaviour at London Business School and a consultant to private and public sector clients. This column appears fortnightly.

EQUITIES

Wall Street and peace hopes lift bourses

EUROPEAN OVERVIEW

By Khozem Merchant

Euro-zone markets enjoyed a flying start to post-Easter trading, helped by overnight news from Wall Street, which closed above 10,000 for the second time, and signs of a cessation of hostilities in Kosovo.

The euro also gained strongly after its recent weakness against the dollar.

Yugoslavia's announcement of a ceasefire, which was later rejected by the US and UK, fuelled a sharp price rise, especially in Germany where the sluggish economic outlook had subdued prices.

The euro-zone telecoms sector was one of the strongest, gaining 3.88 per cent on continuing consolidation.

The German telecoms operator Mannesmann firmed after its takeover at the weekend of rival long-distance provider Otelo Communications. Mannesmann's share price moved up sharply to €130.

The FTSE Eurotop 300 index of Europe's leading stocks rose 13.27 points, or 1.05 per cent, to 1274.34.

The FTSE Ebloc index of shares in euro-zone countries gained 36.37, or 1.24 per cent, to 2,967.24.

Autos (up 2.20 per cent) and diversified industrials (2.31 per cent) were among the better performers.

Insurance also did well, up 2.07 per cent after its recent sluggish performance.

Salomon Smith Barney said in a report that the insurance sector has underperformed its SSB Europe index by 8 per cent in the year to date.

"M&A activity that has taken place so far this year has not provided a positive catalyst to valuation, although the speculation of possible corporate activity in Italy has driven Ina's shares ahead of where we believe fundamentals warrant."

Ina's share price rose after Banca Intesa revealed it held a 2.258 per cent stake in the insurer.

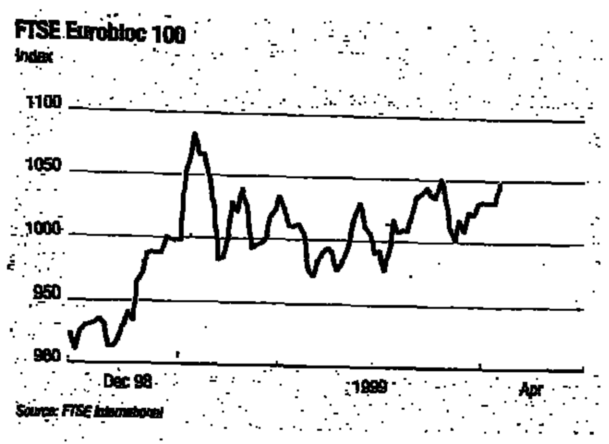
French stocks gained strongly, undeterred by recent sluggish economic data that analysts said may tip the European Central Bank into cutting interest rates tomorrow.

However, French consumer confidence figures yesterday belied the recent macro-economic statistics, suggesting investors are likely to continue to favour French equities.

Utilities bucked the trend, with water (-3.71 per cent) and gas (-2.87) both down strongly.

FTSE Eurobloc 100

Index



Source: FTSE International

THREE MONTH EURIBOR FUTURES (LIFFE) €1m 100-rate

	Open	Sett price	Change	High	Low	Est. vol	Open int.
Jun	97.210	97.210	+0.015	97.230	97.205	42374	191919
Sep	97.260	97.265	+0.025	97.280	97.255	38441	200570
Dec	97.070	97.070	+0.030	97.085	97.060	11497	113469
Mar	97.190	97.190	+0.030	97.205	97.175	23010	98653

THREE MONTH EURO LIBOR FUTURES (LIFFE) €1m 100-rate

	Open	Sett price	Change	High	Low	Est. vol	Open int.
Jun	97.220	97.210	+0.015	97.220	97.210	229	105958
Sep	97.275	97.265	+0.025	97.275	97.260	112	93016
Dec	97.080	97.070	+0.030	97.080	97.060	88	83218
Mar	97.185	97.190	+0.030	97.185	97.185	8	84051

THREE MONTH EURO LIBOR OPTIONS (LIFFE) €1m 100-rate

Strike Price	CALLS Jun	Sep	Dec	Mar	PUTS Jun	Sep	Dec	Mar
97125	0.130				0.080			
97250	0.065	0.120	0.105	0.165	0.120	0.130	0.315	0.255
97375	0.030				0.210			
97500	0.010	0.045	0.045	0.080	0.315	0.305	0.505	0.420

Est. vol. total, Calls 0 Puts 0. Previous day's open int., Calls 182384 Puts 96447

FTSE EUROTOP 100 INDEX FUTURES (LIFFE) €20 per full index point

	Open	Sett price	Change	High	Low	Est. vol	Open int.
Jun	2974.0	2979.0	+39.0	2980.0	2962.0	159	5575

EURO STYLE FTSE EUROTOP 100 INDEX OPTION (AEX) €10 per index point

	2700 C	2700 P	2750 C	2750 P	2800 C	2800 P	2850 C	2850 P	2900 C	2900 P	2950 C	2950 P	3000 C	3000 P	3050 C	3050 P
Apr	230	11	185	16	142	21	103	35	78	53	44	78	20	110	-	-
May	261	47	223	58	188	71	152	87	95	147	74	175	55	207	146	5

Est vol total 200. Prev day's open interest total 13,855. Premiums shown are based on settlement prices.

OTHER INDICES

	Apr 6	Apr 1	Mar 31	1999 High	1999 Low	Since compilation High	Since compilation Low
DJ Stoxx 50	3630.34	(c)	(c)	3815.93	3260.29	3670.82	2433.07
DJ Euro Stx 50	3844.76	(c)	(c)	3885.36	3325.56	3885.36	2419.23
MSCI Europe*	(u)	1247.29	1232.81	1228.12	1153.00	1315.55	510.78

Source: Financial Times Information. *Subject to revision next day. (u) unavailable.

For real-time FTSE Eurotop 300 index quotes call FT Cityline on 0906 843 5920. Calls are charged at 60p per minute at all times.

FTSE Actuaries Share Indices — European series

Produced in conjunction with the Faculty and Institute of Actuaries

Apr 06 National & Regional Markets	Euro Index	Day's %	change points	Yield gross %	xd adj ytd	Total retn (Euro) €
FTSE Eurotop 300	1274.34	+1.05	+13.27	1.91	4.93	1317.45
FTSE Eurotop 100	*2967.24*	*+1.24*	*+36.37*	*1.89*	*11.36*	*1067.95*
FTSE Eurobloc 100	1049.40	+1.62	+16.76	1.93	1.39	1066.68
FTSE EuroMid	1222.54	+0.41	+4.99	2.79	6.82	1273.91
FTSE EuroMid Eurobloc	1205.10	+0.79	+9.42	2.53	4.01	1234.73
FTSE EuroMid Ex UK	*1253.50*	*+1.04*	*+12.82*	*2.37*	*3.71*	*1280.54*
FTSE Eurotop 300 Regions						
Eurobloc	1309.35	+1.60	+20.56	1.87	2.09	1339.58
UK	1237.40	+0.13	+1.63	2.18	9.98	1310.20
Europe Ex-Eurobloc	1249.95	+0.50	+6.28	1.96	7.77	1303.03
Europe Ex-UK	1296.07	+1.58	+20.20	1.77	2.10	1322.54
FTSE Eurotop Industry Sectors						
RESOURCES	1012.03	+0.23	+2.33	2.74	3.69	1062.82
Mining	930.10	-2.12	-20.16	3.66	21.37	973.11
Oil & Gas	*977.32*	*+0.33*	*+3.17*	*2.71*	*2.82*	*1004.44*
BASIC INDUSTRIES	1118.73	+0.90	+9.95	2.56	6.95	1149.95
Chemicals	852.07	+1.09	+9.21	2.50	2.93	870.24
Construction & Bld Matls	*1047.86*	*+1.30*	*+13.47*	*2.24*	*3.06*	*1060.22*
Forestry & Paper	946.32	-2.00	-19.28	4.09	38.68	1029.55
GENERAL INDUSTRIALS	1167.71	+1.62	+18.61	2.34	5.60	1198.52
Aerospace & Defence	*788.79*	*+1.13*	*+8.78*	*2.09*	*3.94*	*803.59*
Diversified Industrials	993.13	+2.31	+22.46	2.05	0.00	1015.85
Electronic & Elect Equip	1076.94	+0.77	+8.23	1.75	9.86	1093.25
Engineering & Machinery	1069.45	+2.07	+21.67	4.10	5.83	1090.46
CYCLICAL CONS GOODS	1299.51	+2.09	+26.63	2.31	0.60	1335.90
Automobiles	947.48	+2.20	+20.38	2.38	0.53	956.81
Household Goods & Texts	1397.82	+1.65	+22.65	2.04	0.00	1409.75
NON-CYC CONS GOODS	1246.72	+0.18	+2.30	1.44	5.29	1286.60
Beverages	925.74	-0.79	-7.41	2.43	10.32	956.29
Food Producers & Processors	882.75	-0.63	-5.59	1.76	1.41	894.46
Health	1060.22	-1.30	-14.00	1.00	0.00	1076.09
Packaging	781.28	+0.35	+2.69	1.16	0.00	782.25
Personal Care & Hse Prods	1116.11	+0.58	+6.42	0.90	1.94	1127.63
Pharmaceuticals	*1177.12*	*+0.63*	*+7.39*	*1.16*	*4.40*	*1188.19*
Tobacco	1314.43	-0.74	-9.79	3.28	26.75	1366.01
CYCLICAL SERVICES	1318.78	+0.35	+4.64	1.84	4.75	1362.31
Distributors	614.84	+3.56	+21.13	1.52	0.00	621.75
General Retailers	1086.98	+1.64	+17.51	1.93	3.04	1112.59
Leisure Entertmt & Hotels	962.98	-1.31	-12.75	1.97	8.72	985.54
Media & Photography	1243.78	+0.58	+7.12	1.68	6.39	1263.60
Rests, Pubs & Breweries	843.26	-2.36	-20.37	2.73	3.71	871.78
Support Services	1063.36	+0.54	+5.72	1.21	1.10	1075.72
Transport	958.20	-0.86	-8.30	2.32	5.18	980.98
NON-CYCLICAL SERVS	1333.50	+2.28	+31.06	1.17	0.46	1434.80
Food & Drug Retailers	1056.49	-0.61	-6.45	1.75	0.51	1073.15
Telecommunications Servs	1384.49	+2.88	+38.78	1.07	0.43	1405.58
UTILITIES	1389.40	-0.67	-9.35	2.84	6.20	1479.79
Electricity	1060.90	+0.41	+4.34	3.02	5.57	1100.37
Gas Distribution	1160.72	-2.87	-34.30	1.41	1.00	1279.10
Water	853.30	-3.71	-33.06	5.14	5.94	905.54
FINANCIALS	1355.74	+1.20	+16.05	2.08	6.69	1399.96
Banks	973.91	-0.97	-9.38	2.43	6.58	994.93
Insurance	1001.22	+2.07	+20.32	1.33	1.78	1015.12
Life Assurance	1107.27	+0.88	+9.69	1.75	4.55	1126.18
Investment Companies	1010.22	-0.93	-9.34	2.24	0.00	1034.45
Real Estate	*729.73*	*+0.14*	*+1.03*	*2.85*	*1.67*	*750.47*
Speciality & Other Fin	1020.45	-0.32	-3.27	2.18	2.94	1040.50
INFORMATION TECH	1008.31	+2.55	+25.09	0.83	4.42	1015.58
Information Tech Hardware	*1124.55*	*+3.02*	*+32.98*	*0.91*	*6.24*	*1134.21*
Software & Computer Serv	739.02	+0.91	+6.64	0.53	0.15	740.91

Further information is available on http://www.ftse.com. Constituent changes with effect 6/4/99: Classification change: Volvo A & Volvo B from 311 (Automobiles) to 353 (Commercial Vehicles & Trucks). Deletions: Astra (Eurotop 100 & 300); Daily Mail & General Trust (EuroMid). Additions: Electrolux (Eurotop100); Daily Mail & Gen.Tst (Eurotop300). Name change: Zeneca Grp to AstraZeneca. For Eurotop 100 weighting changes (Sectors) please fax FTSE Intl. (+171 448 1834) or visit FTSE's website http://www.ftse.com. Please note: Removal of ACT from UK dividends with effect 6/4/99.

CURRENCIES & MONEY

EURO SPOT FORWARD AGAINST THE EURO

Apr 6		Closing mid-point	Change on day	Bid/offer spread	Day's mid high	Day's mid low	One month Rate	One month %PA	Three months Rate	Three months %PA	One year Rate	One year %PA
Europe												
Czech Rep.	(Koruna)	38.3282	-0.1177	031 - 532	38.6850	38.2270	38.4796	-4.7	38.7450	-4.3	39.9416	-4.2
Denmark	(DKr)	7.4315	+0.0011	282 - 347	7.4347	7.4282	7.4341	-0.4	7.4384	-0.4	7.4598	-0.4
Greece	(Dr)	325.040	-2.0060	911 - 170	326.809	324.850	326.9417	-7.0	330.3740	-6.6	349.7755	-5.8
Hungary	(Forint)	258.923	+0.8840	730 - 117	255.320	252.430	255.7376	-13.3	262.0469	-12.8	284.8424	-12.2
Norway	(NKr)	8.3420	-0.0005	371 - 469	8.3570	8.3250	8.3715	-4.2	8.4170	-3.6	8.5663	-2.7
Poland	(Zloty)	4.3127	-0.0003	036 - 217	4.3297	4.3025	-	-	-	-	-	-
Romania	(Leu)	15873.23	-75.7600	573 - 072	-	-	-	-	-	-	-	-
Russia	(Rouble)	27.8723	-0.0693	120 - 329	29.3255	27.7197	-	-	-	-	-	-
Slovakia	(Koruna)	44.8968	-0.0947	198 - 537	45.0810	42.3274	-	-	-	-	-	-
Sweden	*(SKr)*	*8.8922*	*+0.0151*	*847 - 996*	*8.8950*	*8.8880*	*8.8929*	*-0.1*	*8.8940*	*-0.1*	*8.9071*	*-0.2*
Switzerland	(SFr)	1.5963	-0.0018	958 - 969	1.5978	1.5943	1.5938	1.9	1.5898	1.7	1.5725	1.5
UK	(£)	0.6769	+0.0072	765 - 772	0.6788	0.6689	0.6783	-2.5	0.6808	-2.3	0.6920	-2.2
Americas												
Argentina	(Peso)	1.0761	+0.0040	758 - 763	1.0789	1.0704	-	-	-	-	-	-
Brazil	(R$)	1.8591	+0.0068	558 - 622	1.8776	1.8521	-	-	-	-	-	-
Canada	(C$)	1.6191	+0.0145	182 - 200	1.6230	1.6064	1.6218	-2.0	1.6268	-1.9	1.6507	-2.0
Mexico	*(New Peso)*	*10.1987*	*+0.0257*	*909 - 064*	*10.2353*	*10.1439*	*10.3759*	*-20.8*	*10.6905*	*-19.3*	*12.4640*	*-22.2*
USA	($)	1.0762	+0.0040	759 - 764	1.0791	1.0705	1.0781	-2.1	1.0818	-2.1	1.1014	-2.3
Pacific/Middle East/Africa												
Australia	(A$)	1.7149	+0.0201	139 - 159	1.7180	1.6964	1.7177	-2.0	1.7230	-1.9	1.7486	-2.0
Hong Kong	*(HK$)*	*8.3402*	*+0.0303*	*380 - 424*	*8.3502*	*8.3052*	*8.3608*	*-3.0*	*8.4003*	*-2.9*	*8.6905*	*-4.2*
India	(Rs)	45.9086	+0.4084	871 - 300	46.1423	45.4256	46.2224	-8.2	46.8951	-8.6	50.5052	-10.0
Indonesia	(Rupiah)	9389.43	+82.7200	654 - 232	9410.20	9323.80	9600.26	-26.9	10047.34	-28.0	12142.49	-29.3
Israel	(Shk)	4.3498	+0.0118	448 - 543	4.3672	4.3255	-	-	-	-	-	-
Japan	(Y)	130.268	-0.4800	184 - 352	130.600	129.600	129.9489	2.9	129.3796	2.7	126.7709	2.7
Malaysia	(M$)	4.0894	+0.0150	105 - 129	4.1004	4.0685	-	-	-	-	-	-
New Zealand	(NZ$)	2.0320	+0.0202	300 - 340	2.0364	2.0131	2.0349	-1.7	2.0407	-1.7	2.0727	-2.0
Philippines	(Peso)	41.4857	+0.0987	146 - 567	41.7612	41.1110	41.8131	-9.5	42.4487	-9.3	45.4088	-9.5
Saudi Arabia	(SR)	4.0360	+0.0147	349 - 371	4.0489	4.0154	4.0466	-3.2	4.0678	-3.1	4.1735	-3.4
Singapore	(S$)	1.8650	+0.0036	640 - 659	1.8640	1.8582	1.8630	1.3	1.8604	1.0	1.8602	0.3
South Africa	(R)	6.6425	+0.0380	302 - 548	6.6580	6.6034	6.7102	-12.2	6.8287	-11.3	7.3405	-10.5
South Korea	(Won)	1317.76	+2.7000	690 - 859	1324.82	1316.90	-	-	-	-	-	-
Taiwan	(T$)	35.6690	+0.1416	069 - 311	35.7580	35.4820	35.8405	-5.8	36.1163	-5.0	37.2532	-4.4
Thailand	(Bt)	40.7108	+0.2513	475 - 740	40.7740	40.3040	40.8590	-4.4	41.1142	-4.0	42.4351	-4.2
UAE	(Dirham)	3.9527	+0.0146	516 - 537	3.9750	3.9340	3.9605	-2.4	3.9759	-2.3	4.0576	-2.7

Euro Locking Rates: Austrian Schilling 13.7603, Belgian/Luxembourg Franc 40.3399, Finnish Markka 5.94573, French Franc 6.55957, German Mark 1.95583, Irish Punt 0.787564, Italian Lira 1936.27, Netherlands Guilder 2.20371, Portuguese Escudo 200.482, Spanish Peseta 166.386. Bid/offer spreads in the Euro Spot table show only the last three decimal places. Bid, offer, mid spot rates and forward rates are derived from THE WM/REUTERS CLOSING SPOT and FORWARD RATE services. Some values are rounded by the F.T.

BONDS

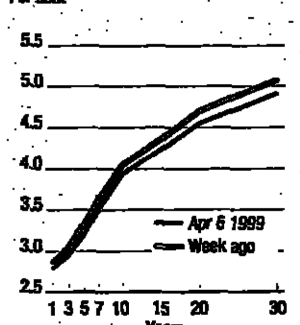
INTEREST RATE SWAPS

Apr 06	Euro-€ Bid	Euro-€ Ask	£ Stg Bid	£ Stg Ask	SwFr Bid	SwFr Ask	US $ Bid	US $ Ask	Yen Bid	Yen Ask
1 year	2.90	2.93	5.16	5.19	1.38	1.42	5.20	5.23	0.25	0.28
2 year	2.96	3.00	5.17	5.20	1.61	1.69	5.38	5.41	0.36	0.39
3 year	3.10	3.14	5.24	5.28	1.86	1.94	5.50	5.53	0.56	0.59
4 year	3.29	3.33	5.27	5.31	2.09	2.17	5.59	5.62	0.80	0.83
5 year	3.49	3.53	5.27	5.31	2.30	2.38	5.65	5.68	1.06	1.09
6 year	3.68	3.72	5.27	5.31	2.50	2.58	5.71	5.74	1.33	1.36
7 year	3.87	3.91	5.27	5.31	2.69	2.77	5.77	5.80	1.55	1.58
8 year	4.05	4.09	5.27	5.31	2.87	2.95	5.82	5.85	1.74	1.77
9 year	4.18	4.22	5.27	5.31	3.03	3.11	5.86	5.89	1.89	1.92
10 year	4.28	4.32	5.28	5.32	3.17	3.25	5.91	5.94	2.02	2.05
12 year	4.44	4.49	5.30	5.35	3.40	3.50	5.98	6.01	2.25	2.29
15 year	4.64	4.68	5.31	5.36	3.66	3.76	6.08	6.11	2.50	2.54
20 year	4.87	4.91	5.32	5.37	3.91	4.01	6.19	6.22	2.69	2.73
25 year	4.99	5.03	5.31	5.38	4.02	4.12	6.20	6.23	2.76	2.80
30 year	5.04	5.08	5.32	5.39	4.11	4.21	6.20	6.23	2.82	2.87

Bid and ask rates as of close of London business. US $ is quoted annual money actual/360 basis against 3 months Libor, £ and Yen quoted on a semi-annual actual/365 basis against 6 months Libor, Euro/Swiss Franc quoted on annual bond 30/360 basis against 6 month Euribor/Libor with the exception of the 1 year rate which is quoted against 3 month Euribor/Libor. Source: Intercapital Europe Limited.

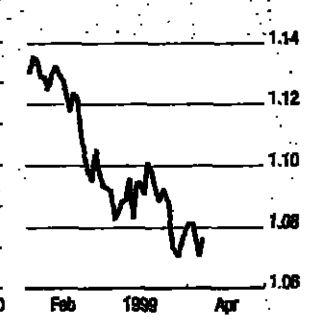
Euro bond yield curve

Per cent



Euro against the dollar

$ per €



Source: Interactive Data/FT Information

EURO-ZONE BONDS

Apr 06	Red date	Coupn	S & P Rating	Bid price	Bid yield	Day's chge yld	Mth's chge yld	Sprd v Govts
SOVEREIGNS								
UK	01/01	4.250	AAA	102.711	2.69	-0.02	-0.52	-0.17
Denmark	01/02	4.750	AA+	104.127	3.15	-0.03	-0.16	+0.19
Sweden	02/01	5.000	AA+	103.492	3.01	-0.02	-0.22	+0.15
Greece	11/06	6.750	BBB	115.307	4.34	-0.09	-0.16	+0.81
SUPRANATIONALS								
ADB	10/07	5.500	AAA	108.830	4.24	-0.09	-0.19	+0.56
EIB	04/08	5.000	AAA	106.458	4.13	-0.08	-0.05	+0.30
Eurofima	*12/09*	*5.625*	*AAA*	*109.685*	*4.48*	*-0.08*	*-0.14*	*+0.50*
World Bank	04/05	7.125	AAA	116.174	3.70	-0.06	-0.17	+0.32
UTILITIES								
EDF	10/03	3.750	n/a	102.086	3.25	-0.07	-0.22	+0.17
TEPCO	02/03	4.750	AA	103.972	3.63	-0.06	-0.24	+0.55
Quebec Hydro	03/08	5.375	A+	105.926	4.55	-0.09	-0.17	+0.72
Norsk Hydro	10/09	7.250	A	101.826	3.33	-0.05	-0.23	+0.57
FINANCIALS								
Bad Wurtt	02/10	5.375	AAA	107.650	4.47	-0.07	-0.05	+0.45
OKB	09/07	5.750	AAA	111.571	4.08	-0.12	-0.14	+0.41
Credit Local	04/08	5.250	AA+	106.993	4.30	-0.08	-0.20	+0.47
Abbey Natl	01/09	5.000	AA-	101.912	4.75	-0.07	-0.08	+0.79
INDUSTRIALS								
Unilever	10/01	5.125	AAA	104.548	3.20	-0.02	-0.21	+0.34
McDonalds	03/08	5.125	AA	105.592	4.36	-0.08	-0.11	+0.53
Philip Morris	06/08	5.625	A	104.464	5.00	-0.09	-0.03	+1.17
BAT Intl Fin	07/05	5.375	A-	103.893	4.73	-0.08	-0.21	+1.20
PFANDBRIEFE								
Rhein Hypo	12/01	5.500	n/a	105.940	3.12	-0.02	-0.30	+0.26
Eurohypo AG	01/04	5.000	n/a	106.518	3.49	-0.03	-0.28	+0.27
Bayer Vereins	01/08	6.000	n/a	112.369	3.89	-0.03	-0.22	+0.36
Depfa	07/08	4.750	n/a	103.605	4.27	-0.01	-0.16	+0.44
HIGH YIELD								
Geberit	04/07	10.125	B+	115.000	6.15	+0.16	-0.40	+2.47
Colt Telecom	11/07	8.875	n/a	107.104	7.73	-0.06	-0.01	+4.05
Impress Metal	*05/07*	*9.875*	*B*	*111.000*	*7.31*	*+0.00*	*-0.21*	*+3.63*
Remy Cointreau	07/05	10.000	B+	105.250	8.89	+0.00	-1.65	+5.51

Standard & Poor's ratings. Source: Interactive Data/FT Information.

LEGAL NOTICES

pre-notice to creditors of

ONLY SMART SECURITIES LIMITED

As consideration is being given to dissolving the company, creditors are requested to identify themselves prior to April 16, 1999 to:

European Trust Services
P.O. Box 7827
1008 AA Amsterdam
The Netherlands

FUTURES MARKET

Cantor upgrades trading system

By Nikki Tait in Chicago

The Cantor Financial Futures Exchange, the first electronic futures market to set up in the US, yesterday launched its fully-interactive trading system – a move which could renew pressure on the Chicago Board of Trade, the largest US exchange.

The Cantor exchange – which was developed by the New York-based broker-dealer in partnership with the New York Board of Trade, a smaller US futures exchange – started business last September, when it began trading fixed-interest treasury bond and note futures.

But although execution was handled electronically, traders and investors had to phone in orders via "terminal operators" located in Cantor's offices. The exchange saw only very small volumes in the first few months of operation.

The new system, launched yesterday, allows trading firms to place orders directly from a desk-top keyboard. This makes it fully-interactive, although the "terminal operators" will also continue to accept orders.

Cantor officials have admitted they pushed ahead with the hybrid system in the hope of forestalling possible legal action by existing exchanges and the terminal-operator feature has been cited as a factor behind CFFE's minimal impact.

Yesterday, Howard Lutnick, Cantor chief executive, said he believed there were about 100-150 keyboards operating at present. He declined to be specific on volume targets, but said the exchange now expected a "step-by-step" improvement in the months ahead.

Mr Lutnick also confirmed that Cantor planned to add additional treasury futures contracts to the screen-based system, and then to follow up with foreign exchange and energy-related products.

Egyptian bank in E£300m offering

Egypt's Commercial International Bank (CIB) said yesterday it was offering the public E£300m ($88m) worth of five-year coupon bonds, reports Reuters from Cairo.

The bank said in an announcement published in the daily newspaper, al-Akhbar, that the bonds would carry a fixed yield of 10.25 per cent, to be paid twice a year.

It added that the offer of the 1,000-bond issue would be open for at least 10 days from April 22.

Investors can buy a minimum of 10 tradeable, non-convertible bonds, the bank said.

CIB made net profits of E£310m in 1998, up from E£267m in the previous year.

The bank's total assets fell from E£13.56bn to E£13.28bn over the period. But shareholders' equity rose from E£1.2bn to E£1.28bn.

CIB was rated by the Nile Rating Company at AA+, indicating a very strong ability to make debt repayments and interest in due time.

European bonds move ahead

BENCHMARK BONDS

By Arkady Ostrovsky in London and John Labate in New York

Growing expectations of an interest rate cut by the European Central Bank gave a further boost to the European bond markets.

Bond prices also rose in response to a report that Yugoslavia had declared a unilateral ceasefire to mark Orthodox Easter.

Some analysts suggested that the ECB could cut the interest rate by 25 basis points and possibly by as much as 50 basis points when its governing council meets tomorrow.

These expectations helped the short end of the European bond yield curve to firm up further.

The yields on the one-year and two-year German bunds fell by 5 basis points.

Phyllis Reed at Barclays Capital said low yields at the short end made investors look for better yield at the long end of the curve.

As a result, the yield on the 10-year German bund also fell by 6 basis points.

"The curve has steepened so much that it made the long end of the market look more attractive," she said.

The German 10-year benchmark bund future rose by more than a point from 113.98 to 115.09.

The 10-year euro swap spreads lost some of the earlier gains and tightened to about 37 basis points.

UK gilts leapt by almost a point ahead of the Bank of England's monetary policy committee meeting tomorrow, which is expected to bring a cut in interest rates. The 10-year gilt future rose from 116.98 to 117.95.

European bond markets also took some comfort from reports that Yugoslavia had declared a ceasefire.

However, most analysts said the impact of these reports would not last long.

The strength of the European bond markets also helped improve sentiment in the US bond market.

US Treasuries rose in mid-day trading as stocks were sold off and on growing anticipation of interest rate cuts in the UK and Europe.

The benchmark 30-year bond was $\frac{13}{32}$ higher at $95\frac{15}{32}$, sending the yield down to 5.536 per cent.

Among shorter-term issues the 10-year note was $\frac{3}{8}$ stronger at $97\frac{1}{32}$, yielding 5.136 per cent, while the two-year note was unchanged at $99\frac{7}{8}$, yielding 4.941 per cent.

The Dow Jones Industrial Average had fallen back in early trading after reaching a record close above 10,000 on Monday, sending money back into bonds.

In spite of the recent comeback in bond prices, the outlook for the market remained uncertain.

"The primary trend is still bearish," said Dennis Hynes, chief investment strategist at R.W. Pressprich in New York.

"The economic growth environment is still very much with us."

Perceptions that commodity prices have hit bottom and may be on the rise was also a factor for the market going forward.

Kosovo and Easter subdue trade

NEW ISSUES

By Edward Luce, Capital Markets Editor

The war in Kosovo and the after-effects of the Easter break conspired to provide a subdued market yesterday although bankers said that secondary market spreads were holding up well.

The Philippines Long Distance Telephone Company, the country's partly-privatised carrier, came to the international bond markets for the first time since before the Asian financial crisis in 1997 with a $175m offering.

The bond, which follows on from a couple of successful sovereign deals by the Philippines early this year, is likely to be viewed as a further sign of the improved sentiment towards emerging markets. "First we had successful sovereign deals and now we will start to get the second wave of Asian corporates," said one official.

The PLDT nine-year offering, which was lead managed by Warburg Dillon Read, will be priced at a spread of 540 basis points over the Treasury benchmark. Elsewhere, Austria issued a five-year €1.1bn ($1.2bn) bond that bankers said was an extension of its domestic auction programme.

Although formally syndicated and targeted at mostly retail investors, the deal had little to distinguish itself from standard domestic issues.

Municipal Housing Finance, which lends to local governments in Finland, made its debut in euros with a €250m offering. An official at ABN Amro, joint lead with CDC Markets, said it was trading at its re-offer spread of 21 basis points over the 10-year French OAT.

New international bond issues

Borrower	Amount m.	Coupon %	Price	Maturity	Fees %	Spread bp	Book-runner
■ US DOLLARS							
PLDT	175	10.50#(l)	99.651	Apr 2008	undiscl	+540(Nov08)	Warburg Dillon Read
■ EUROS(e)							
Republic of Austria	1.1bn	3.40(s)	99.708R	Oct 2004	0.15R	flat(f)	Dresdner KB
VMG(f)	500	4.375(l)	99.267R	Apr 2009	0.325R	+43(4%Apr09)	Deutsche Bank
Municipal Housing Finance	250	4.25	100.00R	Apr 2009	0.325R	+21(f)	ABN Amro/CDC Marchés
BGB Finance Irelandta.l)	75	4.75	100.713R	Mar 2009	0.35R	+63(l)	CDC Marchés
■ STERLING							
European Investment Bank	200	5.00(s)	99.741R	Apr 2039	0.45R	+50(6%-2028)	Barclays/Dresdner KB
■ YEN							
Elf Aquitaine	250	2.25	101.70	May 2004	2.00	-	Warburg Dillon Read
■ SWISS FRANCS							
BNG(b)★	12bn	5.004#(l)	99.95	May 2000	1.60	-	Nomura International
■ AUSTRALIAN DOLLARS							
NSW Treasury Corp★	210	4.60#	99.98	Apr 2002	1.00	-	Nomura International

Final terms, non-callable unless stated. Yield spread (over relevant government bond) at launch supplied by lead manager. ★Unlisted. ‡ Floating-rate note. #Semi-annual coupon. R: fixed re-offer price; fees shown at re-offer level. a) Fungible with €300m. Plus 27 days accrued. b) Redeemed in Y of $ depending on FX rate. e) Spread relates to German govt bonds unless stated. f) Spread re French govt bonds. l) Over interpolated yield. ll) Long 1st coupon. s) Short 1st coupon.

Encouraging signs for euro arbitrage

By Arkady Ostrovsky

For the first time since the launch of the euro in January there are signs of improving arbitrage opportunities in the single currency. The swap spreads – the difference between fixed and floating-rate money – widened by about 5 basis points in the week to April 2.

However, analysts say this is still not enough to attract the world's largest borrowers to the euro market.

The birth of the euro in January was supposed to help create an in-depth liquid European fixed-income market. But while there has been a lot of issuance by European companies and governments, some of the world's biggest borrowers have been notably absent.

Many stayed in the dollar market rather than the euro market because of the tight swap spreads between fixed and floating-rate money. A swap is a contract, usually made between a borrower and a bank, to swap fixed-rate money into floating-rate money.

Most multinational borrowers such as the World Bank and Fannie May, issue fixed-rate bonds that are priced over the benchmark government bonds. However, since their balance sheets are oriented toward floating-rate lending, they swap their fixed-rate money into floating-rate money. A wide spread between floating and fixed-rate money allows swappers to reduce their cost of financing.

Steve Major, chief bond strategist at ING Barings, says a particularly heavy round of fund-raising by European governments so far this year is one reason why swap spreads have become so tight and unappealing for multinational and corporate borrowers.

The six biggest euro-zone markets, keen to establish their benchmarks in the new currency, issued 36 per cent of their planned issuance for the year in the first quarter, according to ING Barings.

In the aftermath of the Russian financial crisis the swap spread, which indicates the difference between government credit risk and banking credit risk, widened to 70 basis points as investors, wary of any risk, sought the safest haven in government bonds.

But as panic over the emerging markets receded, the swap spread has tightened to about 35 basis points. In contrast, the swap spread in dollars is twice as wide as for the euro, which tempts borrowers seeking floating-rate money.

One of the reasons for this is that the US government, which has a large budget surplus, redeems more bonds than it issues. This has driven the US government bond yield curve lower.

Another reason for such dramatic difference between the US dollar and the euro swap markets is that the quality of banking credit in Europe is generally higher than in the US, according to David Munves at Lehman Brothers.

This means that the risk premium for European credit over government credit is lower in Europe, which translates into a tighter swap spread. But analysts say that unless the swap spread in the euro widens, large issuers who seek floating-rate money are unlikely to borrow in euros.

WORLD BOND PRICES

BENCHMARK GOVERNMENT BONDS

Apr 6	Red Date	Coupon	Bid Price	Bid Yield	Day chg yield	Wk chg yield	Month chg yld	Year chg yld
Australia	01/01	8.750	108.7117	4.72	-0.10	-0.21	-0.47	-0.21
	08/08	8.750	125.1755	5.30	-0.13	-0.25	-0.45	-0.26
Austria	03/01	5.250	104.3900	2.87	-0.01	-0.11	-0.33	-1.22
	01/08	5.000	106.8700	4.05	-0.10	-0.12	-0.08	-0.86
Belgium	03/01	5.000	103.9000	2.92	-0.04	-0.08	-0.24	-1.20
	03/09	3.750	96.9000	4.14	-0.12	-0.16	-0.06	-0.77
Canada	12/00	5.000	100.3830	4.75	-0.01	-0.16	-0.49	-0.06
	06/08	6.000	107.6300	4.95	-0.03	-0.16	-0.38	-0.25
Denmark	11/00	9.000	106.8300	3.18	-0.02	-0.12	-0.31	-1.15
	11/09	6.000	114.2480	4.29	-0.06	-0.11	-0.15	-0.78
Finland	08/00	4.000	101.3170	2.85	-0.07	-0.07	-0.22	-0.84
	04/09	5.000	106.6950	4.17	-0.05	-0.12	-0.08	-0.63
France	07/00	4.000	101.4300	2.81	-0.04	-0.09	-0.28	-1.24
	04/06	7.250	122.6800	3.56	-0.10	-0.16	-0.18	-1.08
	04/08	4.000	100.0100	4.00	-0.11	-0.17	-0.09	-0.86
	04/29	5.500	109.2200	4.91	-0.11	-0.17	-0.08	-0.48
Germany	05/01	5.000	104.2700	2.88	-0.07	-0.05	-0.22	-1.08
	01/08	6.000	113.6900	3.86	-0.10	-0.15	-0.21	-1.01
	01/09	3.750	98.8300	3.90	-0.11	-0.13	-0.12	-0.94
	07/28	4.750	98.0700	4.87	-0.13	-0.16	-0.11	-0.51
Greece	03/00	9.800	100.6100	9.16	-0.18	-0.09	-0.27	-0.86
	01/09	8.300	102.7000	5.92	-0.07	-0.03	-0.14	-2.29
Ireland	10/01	6.500	108.4800	2.98	-0.04	-0.18	-0.27	-1.82
	08/08	6.000	115.1000	4.03	-0.07	-0.13	-0.17	-0.93
Italy	07/01	4.500	103.1900	3.00	-0.04	-0.05	-0.20	-1.46
	07/03	4.500	104.7300	3.30	-0.06	-0.08	-0.26	-1.38
	05/09	4.500	102.9200	4.14	-0.05	-0.11	-0.07	-0.89
	11/27	6.500	120.3600	5.13	-0.06	-0.12	-0.03	-0.40
Japan	12/00	6.900	111.2280	0.23	+0.02	+0.02	+0.04	-0.39
	12/03	4.100	114.7220	0.89	+0.02	+0.09	+0.06	-0.37
	06/08	1.800	101.3260	1.64	+0.05	+0.05	+0.06	-0.08
	09/18	2.300	96.6470	2.52	+0.05	+0.06	+0.04	-0.04
Netherlands	01/01	9.000	110.3700	2.86	-0.03	-0.11	-0.25	-1.21
	07/09	3.750	97.5200	4.05	-0.09	-0.12	-0.08	-0.77
New Zealand	02/01	8.000	105.5912	4.75	-0.04	-0.09	-0.35	-3.10
	07/09	7.000	109.8267	5.72	-0.07	-0.16	-0.31	-1.18
Norway	05/01	7.000	104.5000	4.72	-0.06	-0.12	-0.27	+0.37
	05/09	5.500	105.8000	4.79	-0.06	-0.13	-0.20	-0.39
Portugal	03/00	5.375	102.2700	2.89	+0.03	-0.06	-0.04	-1.24
	06/08	5.375	109.1500	4.16	-0.08	-0.10	-0.08	-0.80
Spain	01/01	5.000	103.8000	2.80	-0.02	-0.08	-0.25	-1.42
	07/09	5.150	106.6000	4.34	-0.04	-0.16	-0.14	-0.62
Sweden	05/00	10.250	107.4369	3.02	+0.01	-0.02	-0.28	-1.66
	05/08	6.500	118.4780	4.27	-0.05	-0.12	-0.11	-0.86
Switzerland	06/00	4.500	103.6500	1.30	-0.02	-0.08	-0.13	-0.53
	01/08	4.250	115.6500	2.36	-0.04	-0.07	+0.04	-0.63
UK	11/01	7.000	105.4400	4.73	-0.08	-0.05	-0.21	-1.84
	12/03	6.500	108.1900	4.53	-0.09	-0.08	-0.18	-1.36
	12/09	5.750	111.1600	4.43	-0.09	-0.09	-0.13	-1.32
	12/28	6.000	125.4400	4.45	-0.08	-0.05	-0.10	-1.24
US	01/01	4.500	99.2016	4.96	-0.03	-0.03	-0.20	-0.53
	02/04	4.750	98.8456	5.02	-0.03	-0.06	-0.24	-0.54
	11/08	4.750	97.0721	5.14	-0.05	-0.06	-0.19	-0.44
	02/29	5.250	95.9372	5.53	-0.08	-0.05	-0.08	-0.32

London closing. * New York closing. Source: Interactive Data/FT Information
Yields: Local market standard/Annualised yield basis. Yields shown for Italy exclude withholding tax at 12.5 per cent payable by nonresidents.

10 YEAR BENCHMARK SPREADS

Apr 6	Bid Yield	Spread vs Euros	Spread vs T-Bonds
Australia	5.32	+1.36	+0.18
Austria	4.25	+0.29	-0.89
Belgium	4.20	+0.24	-0.94
Canada	4.96	+1.00	-0.18
Denmark	4.27	+0.31	-0.87
Finland	4.17	+0.21	-0.97
France	4.02	+0.06	-1.12
Germany	3.96	-	-1.18
Greece	5.89	+1.93	+0.75
Ireland	4.06	+0.10	-1.08
Italy	4.17	+0.21	-0.97
Japan	1.70	-2.26	-3.44
Netherlands	4.08	+0.12	-1.06
New Zealand	5.71	+1.75	+0.57
Norway	4.79	+0.83	-0.35
Portugal	4.15	+0.19	-0.99
Spain	4.12	+0.16	-1.02
Sweden	4.31	+0.35	-0.83
Switzerland	2.45	-1.51	-2.69
UK	4.49	+0.53	-0.65
US	5.14	+1.18	-

Source: Interactive Data/FT Information
London closing. * New York closing
Annualised yield basis.

EMERGING MARKET BONDS

Apr 6	Red date	Coupn	S & P Rating	Bid price	Bid yield	Day's chge yld	Mth's chge yld	Sprd vs US
■ EUROPE								
Croatia	02/02	7.000	BBB-	93.5000	9.63	+0.36	+0.58	+4.66
Poland	07/04	7.125	BBB-	103.5000	6.31	-0.03	+0.32	+1.28
Russia	06/07	10.000	n/a	27.0200	42.00	+1.90	-6.52	+36.90
■ LATIN AMERICA								
Argentina	08/27	9.750	BB	84.2679	11.65	-0.06	-0.33	+6.16
Brazil	05/27	10.125	B+	74.0000	13.79	+0.04	-2.26	+8.30
Mexico	05/26	11.500	BB	112.1500	10.17	+0.19	-0.84	+4.70
■ ASIA								
China	07/06	7.750	BBB+	102.3016	7.32	-0.04	-0.49	+2.25
Philippines	10/16	8.750	BB+	93.6607	9.50	-	-0.30	+4.22
Thailand	04/07	7.750	BBB-	101.7241	7.46	-0.07	-0.50	+2.36
■ AFRICA/MIDDLE EAST								
Lebanon	07/00	9.125	BB-	101.5107	7.80	-0.02	+1.10	+2.89
South Africa	10/06	8.375	BB+	101.2393	8.14	-0.18	-0.70	+3.07
Turkey	08/07	10.000	B	91.7500	11.56	+0.11	-0.14	+6.46
■ BRADY BONDS								
Argentina	03/23	5.750	BB	69.8251	9.12	-0.09	-0.16	+3.71
Brazil	04/14	5.000	B+	65.1250	12.88	+0.02	-1.62	+7.84
Mexico	12/19	6.250	BB	78.6250	8.45	+0.03	-0.30	+3.11
Venezuela	03/20	6.750	B+	70.3750	10.20	+0.02	-1.05	+4.85

London closing. Prices in US$. Standard & Poor's ratings. Source: Interactive Data/FT Information.

BOND FUTURES AND OPTIONS

France

■ NOTIONAL EURO BOND FUTURES (MATIF) €100,000

	Open	Sett price	Change	High	Low	Est. vol.	Open int.
Jun	95.00	95.72	+0.62	95.78	95.00	21,105	79,233
Sep	-	95.54	+0.62	-	-	-	-

■ LONG TERM EURO BOND OPTIONS (MATIF)

Germany

■ NOTIONAL EURO BUND FUTURES (EUREX) €100,000

	Open	Sett price	Change	High	Low	Est. vol.	Open int.
Jun	114.35	115.09	+1.16	115.10	114.35	491,133	544,453
Sep	114.55	115.22	+1.11	115.18	114.55	3,673	9,909

Italy

Spain

UK

US

Japan

Euro

US CORPORATE BONDS

Apr 5	Red date	Coupn	S & P Rating	Bid price	Bid yield	Day's chge yld	Mth's chge yld	Sprd v Govts
■ UTILITIES								
Pac Bell	07/02	7.25	AA-	104.7264	5.62	-0.11	-0.20	+5.62
NY Tel	08/25	7.00	A+	98.9879	7.08	-0.08	-0.11	+1.49
CWE	05/08	8.00	BBB	112.7798	6.14	-0.10	-0.21	+0.95
■ FINANCIALS								
GECC	05/07	8.75	AAA	117.7668	5.95	-0.11	-0.14	+0.76
Banc One	08/02	7.25	A	104.3300	5.79	-0.08	-0.17	+5.79
CNA Fin	01/18	6.95	A-	94.2389	7.52	-0.13	-0.18	+1.93
■ INDUSTRIALS								
WMX Tech	04/99	6.25	BBB+	100.0000	5.39	-0.14	-0.33	+0.91
Wal Mart	05/02	6.75	AA	103.9030	5.36	-0.08	-0.22	+5.36
Dayton Hud	06/21	9.70	A-	131.1901	6.92	-0.10	-0.02	+1.33
■ AGENCIES								
FHLMC	04/07	7.14	N/A	108.2244	5.83	-0.11	-0.03	+0.84
SLMA	03/00	7.50	N/A	102.1194	5.11	-0.06	-0.20	+0.67
FNMA	02/16	8.95	N/A	131.3317	6.12	-0.09	-0.06	+0.53
FFCB	06/06	8.95	N/A	118.5843	5.74	-0.10	-0.10	+0.55
■ HIGH YIELD								
Stone Cont	02/01	9.88	B	101.5000	0.00	-	-	-
AK Stl	12/01	9.13	BB-	106.0000	0.00	-	-	-
Pacalta	06/04	10.75	B-	98.0000	0.00	-	-	-

NY latest. Standard & Poor's ratings. Yields: semi-annual basis. Source: Interactive Data/FT Information

US INTEREST RATES

Latest		Treasury Bills and Bond Yields			
Prime rate	$7\frac{3}{4}$	One month	-	Two year	4.94
Broker loan rate	$6\frac{1}{2}$	Two month	-	Three year	4.97
Fed.funds	$4\frac{3}{4}$	Three month	4.40	Five year	5.02
Fed.funds at intervention	-	Six month	4.53	10-year	5.14
		One year	4.67	30-year	5.54

INTERNATIONAL BONDS

Apr 6	Red date	Coupon	S & P Rating	Bid price	Bid yld	Day's chge yld	Mth's chge yld	Spread v Govts
■ $								
EIB	04/07	7.250	AAA	108.7713	5.85	-0.04	-0.15	+0.75
ABN Amro	08/07	7.125	AA-	104.4787	6.40	-0.05	-0.04	+1.30
Quebec	01/07	7.000	A+	105.6399	6.08	-0.04	-0.03	+0.98
Citicorp FRN	02/04	5.086	AA-	99.5528	5.17	-0.05	-0.21	+0.14
■ C$								
Bayer L-Bk	06/04	9.500	AAA	118.4886	5.41	-0.01	-0.38	+0.22
Toronto (M of)	05/04	8.500	AA+	113.5984	5.39	-	-0.33	+0.20
Bell Canada	07/98	10.825	A+	101.3261	5.18	-0.02	-0.47	+1.27
Deutsche B FRN	09/02	5.875	AA+	101.1824	5.49	-0.02	-0.36	+0.41
■ £								
EIB	12/07	7.625	AAA	116.3800	5.22	-0.10	-0.04	+0.64
Dresdner Bk	12/07	7.750	AA-	112.0067	5.93	-0.10	-0.14	+1.35
British Gas	03/00	7.625	A+	101.9800	5.48	-0.01	-0.21	+0.71
Abbey Nat FRN	02/02	5.587	AA	100.0177	4.81	-0.09	+0.33	+0.18
■ SFR								
EIB	01/08	3.750	AAA	103.9167	3.23	-0.04	+0.03	+0.94
Brit Columbia	02/02	3.250	AA	103.8037	1.87	-0.03	-0.07	+0.25
Hydro-Quebec	05/01	6.750	n/a	108.7370	2.46	-0.02	-0.12	+1.09
Gen Elect.	09/01	1.280	n/a	99.7232	1.44	-0.02	-0.09	+0.01
■ YEN								
IBRD (World Bk)	03/02	5.250	AAA	113.9350	0.48	-0.02	+0.11	-0.03
Spain (Kingdom)	03/02	5.750	AA+	115.3639	0.50	-0.02	+0.08	-0.01
Cred Foncier	08/02	4.750	A	112.2639	0.99	+0.01	+0.10	+0.48
Italy (Rep of)	07/99	0.516	AA	100.0217	0.25	+0.12	+0.07	+0.04
■ A$								
IBRD (World Bk)	02/08	6.000	AAA	103.3042	5.52	-0.12	-0.46	+0.23
Nw Sth Wales Tr	05/06	6.500	n/a	105.4654	5.55	-0.13	-0.45	+0.36
S. Aus Gov Fin	06/03	7.750	AA	108.1465	5.53	-0.11	-0.45	+0.57
GMAC Aust	05/01	9.000	n/a	107.1459	5.33	-0.11	-0.50	+0.56

London closing. Standard & Poor's ratings. Yields: Local market standard/Annualised basis. Source: Interactive Data/FT Information

UK BONDS

FTSE Actuaries Government Securities

UK Indices

UK GILTS PRICES

Other Fixed Interest

حكذا من الأصل

CURRENCIES & MONEY

Rate cut hope pushes sterling lower

MARKETS REPORT

By Alan Beattie and Robert Chote

Expectations that the Bank of England's monetary policy committee will resume its cuts in UK interest rates tomorrow briefly pushed the pound to an 18-month low against the dollar yesterday.

At one stage sterling was more than 1 per cent down from its overnight highs in Asia, falling below $1.5850 for the first time since September 1997. But it recovered some of its lost ground later, closing just over a cent down on the day at $1.59.

Analysts said that the market had factored in a quarter-point rate reduction to 5.25 per cent, while the dollar was supported by continued confidence in US economic prospects and the strength of Wall Street.

David Bloom, currency analyst at HSBC in London, said that it looked as if sterling was making an attempt to break out of its range against the dollar.

"Sterling volatilies against the dollar are now higher than those against the euro," he said. "This may be part of sterling's change over to a euro-based currency."

But Mr Bloom said that it was hard to pin down any one event which made the market more bearish on the pound against the dollar.

"It may have started with comments from the Bank of England's monetary policy committee implying they were envious of the weak euro," he said. "It certainly doesn't seem to have been the real economy, since forecasts of economic growth in the UK this year have been getting better."

POUND IN NEW YORK

Apr 6	—Latest—	— Prev. close —
£ spot	1.5940	1.6005
1 mth	1.5935	1.6013
3 mth	1.5931	1.5995
1 yr	1.5957	1.6023

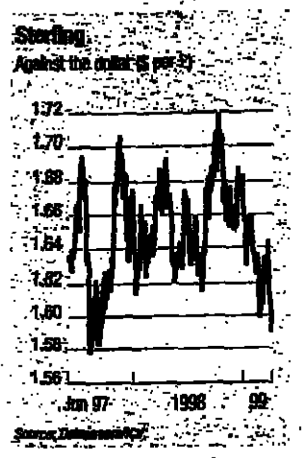
Sterling's decline was not deflected by the Confederation of British Industry's latest survey, showing rising service sector confidence.

■ The euro put on a late spurt against the dollar in London trading as Serbia's announcement of a unilateral cease fire raised hopes of a peace deal.

The euro had been bumbling along contendedly for much of the day within a narrow range between $1.07 and $1.074. The news from Yugoslavia saw the euro bounce straight up to $1.078 before closing at $1.076.

Tim Fox's team at Standard Chartered Bank argued that the announcement would provide only temporary relief for the beleagured European currency. Nevertheless the likelihood of a quarter point cut in euro-zone interest rates on Thursday provided "the potential, albeit short-lived, for $1.09."

Analysts are in two minds about what to expect from the European Central Bank this week. Reuters found 13 economists predicting a cut with 12 expecting no change. Some think a cut could boost the euro by demonstrating that the ECB is serious about supporting growth.



■ As the new fiscal year starts in Japan, attention of yen traders turns from talk of capital repatriation and option expiries to the prospects for Japan's economy.

Few traders have drawn much conclusion from the behaviour of the yen in recent weeks. With talk of option knock-out protection by east Asian dealers and speculation about large dollar purchases by Japanese banks, the movements of the yen have had little connection with underlying economic fundamentals.

But despite large intraday movements, the yen recently has been better behaved than its rapid gyrations in earlier months might have suggested. It traded in a fairly close range around Y120 for the last few weeks of the fiscal year. Analysts say that this is a comfortable range for the currency, and one that the Bank of Japan and the Ministry of Finance will wish to retain. Yesterday the yen closed slightly up on the day at Y121.1.

"Below Y110, the profitability of the corporate sector is in doubt through export uncompetitiveness. Above Y125, the asset positions of Japanese banks are inflated and their capital adequacy ratios threatened," said Paul Chertkow of Bank of Tokyo-Mitsubishi.

But the temporary stability in the currency belies a real economy still in deep trouble. Despite hints from officials that the economy is on the upturn and a slight recovery in the tankan business confidence survey this week, other indicators have shown production still mired in recession and extreme risk aversion leaving consumers unwilling to lend.

OTHER CURRENCIES

Apr 6	£	$
Czech Rp	56.5842 - 56.6640	35.6010 - 35.6310
Hungary	374.828 - 375.436	235.830 - 236.080
Iran	4770.90 - 4768.20	3000.00 - 3008.99
Kuwait	0.4851 - 0.4855	0.3052 - 0.3053
Peru	5.3213 - 5.3281	3.3480 - 3.3510
Poland	6.3576 - 6.3651	4.0000 - 4.0150
Russia	41.0860 - 41.2683	25.8500 - 25.9500
U.A.E.	5.8375 - 5.8413	3.6726 - 3.6731

POUND SPOT FORWARD AGAINST THE POUND

Apr 6		Closing mid-point	Change on day	Bid/offer spread	Day's mid high	low	One month Rate	%PA	Three months Rate	%PA	One year Rate	%PA	Bank of Eng. index
Europe													
Austria*	(Sch)	20.3288	-0.2206	183 - 393	20.5860	20.2591	20.2863	2.5	20.211	2.3	19.8862	2.2	102.5
Belgium*	(BFr)	59.5962	-0.6466	654 - 269	60.2920	59.3010	59.4716	2.5	59.2508	2.3	58.2985	2.2	102.1
Denmark	(DKr)	10.9789	-0.1174	735 - 842	11.0895	10.9518	10.9587	2.1	10.9254	1.9	10.7804	1.8	105.2
Finland*	(FM)	8.7840	-0.0953	794 - 885	8.8860	8.7540	8.7857	2.5	8.7331	2.3	8.5928	2.2	80.8
France*	(FFr)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

DOLLAR SPOT FORWARD AGAINST THE DOLLAR

Apr 6		Closing mid-point	Change on day	Bid/offer spread	Day's mid high	low	One month Rate	%PA	Three months Rate	%PA	One year Rate	%PA	J.P. Morgan index
Europe													
Austria*	(Sch)	12.7866	-0.0471	836 - 896	12.8493	12.7526	12.7637	2.1	12.7197	2.1	12.494	2.3	102.1
Belgium*	(BFr)	37.4854	-0.1381	767 - 941	37.6690	37.3860	37.4185	2.1	37.2892	2.1	36.6277	2.3	102.0
Denmark	(DKr)	6.9056	-0.0244	042 - 070	6.9403	6.8840	6.8957	1.7	6.8759	1.7	6.7731	1.9	104.3
Finland*	(FM)	5.5250	-0.0204	237 - 263	5.5521	5.5104	5.5152	2.1	5.4961	2.1	5.3996	2.3	80.0

WORLD INTEREST RATES

MONEY RATES

Apr 6	Over night	One month	Three mths	Six mths	One year	Lomb. inter.	Dis. rate	Repo rate
Euro-zone	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-	3.00	3.00
Switzerland	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-	1.00	-
US	[illegible]	[illegible]	[illegible]	5	[illegible]	-	4.50	-
Japan	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-	0.50	-
■ $ LIBOR BBA London								
Interbank Fixing	-	[illegible]	5	[illegible]	[illegible]	-	-	-
US Dollar CDs	-	4.77	4.80	4.83	4.96	-	-	-
Euro Linked Ds	-	[illegible]	[illegible]	[illegible]	[illegible]	-	-	-
SDR Linked Ds	-	[illegible]	[illegible]	[illegible]	[illegible]	-	-	-
BBA Euro Libor	-	[illegible]	[illegible]	[illegible]	[illegible]	-	-	-
Euro Euribor	-	2.933	2.905	2.889	2.907	-	-	-
EONIA	2.98	-	-	-	-	-	-	-
EURONIA	2.9782	-	-	-	-	-	-	-

London interbank fixing rate (LIBOR) is the BBA London rate, fixed at 11am. Mid rates are shown for the domestic Money Rates, US$ CDs, Euro & SDR Linked Deposits (Ds).

INTERNATIONAL CURRENCY RATES

Apr 6	Short term	7 days notice	One month	Three months	Six months	One year
Euro	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Danish Krone	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Sterling	[illegible]	[illegible]	[illegible]	[illegible] - 5	[illegible]	[illegible]
Swiss Franc	[illegible]	[illegible]	[illegible] - 1	[illegible]	[illegible]	[illegible]
Canadian Dollar	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
US Dollar	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Japanese Yen	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Asian $Sing	[illegible] - 2	[illegible]	[illegible]	[illegible]	2 - [illegible]	[illegible]

Short term rates are call for the US Dollar and Yen, others: two days' notice.

■ THREE MONTH EURIBOR FUTURES (MATIF) Paris interbank offered rate

	Open	Sett price	Change	High	Low	Est. vol	Open int.
Jun	97.215	97.215	-	97.225	97.205	6,561	41,083
Sep	97.255	97.260	+0.005	97.275	97.250	2,875	30,568

■ THREE MONTH EURIBOR FUTURES (LIFFE) €1m 100-rate

	Open	Sett price	Change	High	Low	Est. vol	Open int.
Jun	97.210	97.210	+0.015	97.230	97.205	42374	191919
Sep	97.260	97.265	+0.025	97.280	97.255	38441	200570

CROSS RATES AND DERIVATIVES

EXCHANGE CROSS RATES

UK INTEREST RATES

LONDON MONEY RATES

EMS EUROPEAN CURRENCY UNIT RATES

■ THREE MONTH EURODOLLAR (CME) $1m points of 100%

	Open	Latest	Change	High	Low	Est. vol	Open int.
Jun	94.98	95.00	-	95.00	94.97	35,452	458,953
Sep	94.89	94.94	+0.02	94.94	94.88	35,542	441,815
Dec	94.55	94.63	+0.02	94.62	94.53	15,300	351,046

■ US TREASURY BILL FUTURES (CME) $1m per 100%

Jun	95.77	95.77	+0.03	95.77	95.77	8	1,441

BASE LENDING RATES

	%		%		%
Adam & Company	5.50	Exeter Trust Limited	6.50	Smith & Williamson	5.50
Allied Irish Bank (GB)	5.50	●Robert Fleming & Co	5.50	Sun Bank	5.50
●Henry Ansbacher	5.50	Habib Bank AG Zurich	5.50	TSB	5.50
Banco Bilbao Vizcaya	5.50	Heritable & Gen Inv Bk	5.50	United Bank of Kuwait	5.50
Bank of Cyprus	5.50	C. Hoare & Co	5.50	Unity Trust Bank Plc	5.50
Bank of Ireland	5.50	●SG Hambros Bank & Trust	5.50	Whiteaway Laidlaw	5.50
Bank of India	5.50	Hongkong & Shanghai	5.50	Yorkshire Bank	5.50
Bank of Scotland	5.50	Investec Bank (UK) Ltd	5.50	● Members of London Investment Banking Association	
Barclays Bank	5.50	Julian Hodge Bank	5.50		
Brit Bk of Mid East	5.50	●Leopold Joseph & Sons	5.50		
●Brown Shipley & Co Ltd	5.50	Lloyds Bank	5.50		
Citibank NA	5.50	Midland Bank	5.50		
Clydesdale Bank	5.50	NatWestminster	5.50		
The Co-operative Bank	5.50	●Rea Brothers	5.50		
Coutts & Co	5.50	Royal Bk of Scotland	5.50		
Cyprus Popular Bank	5.50	Scottish Widows Bank	5.50		
Duncan Lawrie	5.50	●Singer & Friedlander	5.50		

COMMODITIES & AGRICULTURE

METALS NEW OFFERING DUE TO BE LAUNCHED IN JULY OR SEPTEMBER

LME index contract will target investment funds

By Gillian O'Connor
Mining Correspondent

The London Metal Exchange is targeting business from investment funds with the launch of its new metals index contract, scheduled for July or September this year.

These funds are sometimes blamed for increasing the volatility of metal prices, and hence the earnings and share prices of mining shares. But David King, LME chief executive, said it welcomed investment funds, if they provided extra liquidity for the market and did not cause excessive volatility.

Most LME business still comes from trade users, but the proportion has fallen from 90 per cent to 70-75 per cent in recent years.

The new index contract will comprise aluminium, copper, lead, nickel, tin and zinc, and will be weighted to reflect global production volume and LME trade liquidity. Initial weights are: aluminium, 41.8 per cent; copper, 33.4 per cent; lead, 8.4 per cent; nickel, 2.0 per cent; tin, 1.0 per cent; and zinc, 13.4 per cent.

The index will have an initial value of 1,000, with a contract size of $10,000, and will be cleared in cash. It will be tradeable out to 12 months and options will be available from the outset.

The index, to be known as LMEX, will be traded on the floor of the exchange during the unofficial "kerb" trading period, and in telephone trading at any time.

Hitherto investment funds have had the choice of trading in the underlying metals or using over-the-counter products. The LME suggested yesterday that existing active users of OTC products may start to use LMEX as well.

It may also become the accepted yardstick for base metal prices, and in due course be used as the basis for retail investment funds.

The exchange will not hesitate to intervene if it is worried that LMEX is disrupting the underlying metal contracts.

Some metal traders, however, are not convinced there is a real need for the new contract, or that investment funds will adopt it. There are also some disagreements with the weightings accorded to different metals, and the compilation method.

"It looks as if it might appeal to general commodity funds. But I would expect the discretionary funds and technical funds to stay with the individual metals," said Ted Arnold, minerals strategist at Prudential-Bache.

"Until we get an idea of the liquidity of the new contract, it is difficult to see what will attract funds away from the existing instruments," said Peter Richardson, head of commodity research at Warburg Dillon Reed. "The index will suppress volatility and the funds like volatility."

Brazil's new coffee alliance

By Paul Solman

Brazil, the world's largest coffee producer, will inaugurate its new coffee trade group, the Council of Green Coffee Exporters of Brazil (Cecafe), on April 27.

The group is a joint venture between the country's two rival organisations, the Brazilian Association of Coffee Exporters (Abecafe) and the Brazilian Federation of Coffee Exporters.

Its launch is the first step towards a full merger of Abecafe and Febec, which would create one organisation to represent Brazil's coffee growers. Currently, the two rival groups each represent about half of the country's coffee output.

Until four years ago, Febec was Brazil's sole coffee trade organisation. Abecafe was established in 1995 after members broke away from Febec amid an argument over exports.

Febec had committed Brazil to quotas in an effort to limit world coffee supplies and support prices. But members of Abecafe favoured efforts to increase global coffee consumption.

Brazil produced about 9.3m tonnes in the year to March 1999, according to the International Coffee Organisation.

Peruvian zinc mine recovers its shine as privatisation nears

To attract bidders for Cerro de Pasco, Centromin is trying to reduce the social and environmental problems, writes **Sally Bowen**

The high Andean mining town of Cerro de Pasco is as run down as ever. Pigs snuffle in piles of garbage amid depressing shacks; ragged children play in churned-up mud; the town's unpaved roads are a disaster of planning and upkeep.

It is not entirely the fault of Centromin, the state-owned mining company formed when Peru's leftwing military nationalised the once thriving US-owned Cerro de Pasco Corporation in 1972.

Cerro's fabulous zinc mine has drawn settlers to this barren and inhospitable plain, some 4,300m above sea level, throughout the 20th century.

Cerro's problems spiralled in the early 1990s, with a fresh flood of migrants from far-flung peasant farming communities, fleeing terrorist violence.

Almost a fifth of Cerro's 60,000-plus population depend directly on the mine for their living: most of the rest live from the commercial activity it generates.

Yet neither the state nor Centromin has succeeded in improving their lot.

That could be about to change. On April 19, the Cerro de Pasco mine – the new, separate company is known as "Paragsha" – will be privatised. Base price for the installations has been set at $60m and the new operator will be required to invest another $70m within five years.

Potential bidders include Cominco of Canada, Switzerland-based Glencore, and Doe Run of the US, which acquired the vast metallurgical complex of La Oroya nearby in late 1997.

It had originally been planned to sell off Centromin's entire operations as one unit.

But the state mining and refining group – comprising seven mines, the La Oroya complex, four hydros and a railway – proved too large, the social and environmental realities too daunting, for one buyer to swallow.

At auction in May 1994, no bids were presented, although since then some of the individual units have found new owners.

Belatedly, and in advance of privatisation, Centromin has taken steps to appease the often hostile Cerro residents.

Some $5.5m is going into improvements to roads, state-owned schools and studies for drinking water and sewage systems.

The new operator will still face social problems, but they will be fewer, says Jesus Vilca, general manager. There have also been impressive efforts on the once disastrous environmental front.

Environmental pollution was blamed for deterring potential bidders in 1994.

Centromin is investing $38.6m on cleaning up the polluted San Juan river, reorganising waste disposal and greening a landscape ruined through the decades.

Once yellow and clogged with tailings sediment, the river now runs clear; ducks dive for fish and frogs in the river.

Centromin is dredging the river bed, strengthening the banks and planting beds of rushes, and the recently polluted Lake Junin is clean again.

Men are digging trenches around the unsightly mineral dumps, which leak acid water to pollute lakes and rivers. Canadian environmental consultants have temporarily solved the problem.

Centromin, which has assumed the environmental debt, will later build a modern water treatment plant, financed from a new, $50m environmental reserve fund which has been created from past profits.

Other pre-sale investments have been made to enhance the mine. Last year's exploration programme pushed mine reserves up by around 7m tonnes; unprecedented exploration drilling has been carried out further afield; and some $5m in new machinery has been acquired for mine operations.

The most immediate area for mine expansion is called Matagente. At the edge of the huge open pit, it was for years a no-go area.

Some 250 migrant families had settled on the Centromin-owned land, building makeshift homes and resisting attempts to dislodge them.

Now, after protracted negotiations, homes have been bought and demolished, and residents have moved to other sites. Realistically, preparatory work could commence at the new open pit by July, says Mr Vilca.

Assuming a successful privatisation this month, developing Matagente and consolidating the profitable mine – whose sales exceed $100m a year – will fall to the new owner.

Peruvian peasants: the state-owned mining company is improving the lot of migrants at Cerro

Oil prices continue to firm

MARKETS REPORT

By Robert Corzine, Paul Solman and Gillian O'Connor

Most London markets were slow yesterday, re-opening after the four-day break for Easter. However, oil prices continued to firm with Brent Blend for May delivery trading at about $15 a barrel for much of the day.

In late activity on London's International Petroleum Exchange, May Brent was quoted at $15.02 a barrel, 30 cents up on the close last Thursday.

Several short-term developments helped bolster the generally positive sentiment that has prevailed since the run-up to last month's Opec meeting. Although Iraqi exports remained steady, there were weekend allied air attacks on facilities near the pipelines. A new production disruption in Nigeria also helped fuel yesterday's rise.

Trading was light on the London International Financial Futures and Options Exchange yesterday. Robusta coffee prices closed lower, the May contract at $1,522 a tonne, down $17 from Thursday's close. Volume was just 4,998 lots, though July overtook May as the most actively traded contract.

Precious metal prices were also initially weaker in London. The morning gold fix on the London bullion market was the lowest since September last year.

Base metal prices on the London Metal Exchange were mixed. Larry Kaplan of Flemings Research said that although the second quarter of the year typically shows strong demand, it is unlikely consumers will come back into the market with much appetite in this quarter – given the current weakness in Japan and Europe.

COMMODITIES PRICES

BASE METALS

LONDON METAL EXCHANGE

(Prices from Amalgamated Metal Trading)

■ ALUMINIUM, 99.7 PURITY ($ per tonne)

	Cash	3 mths
Close	1221-22	1244-45
Previous	1215-6	1237-8
High/low		1249/1237
AM Official	1221.5-22.0	1242.5-3.5
Kerb close		1248-49
Open int.	294,569	
Total daily turnover	49,339	

■ ALUMINIUM ALLOY ($ per tonne)

	Cash	3 mths
Close	1104-09	1125-30
Previous	1100-05	1122-3
High/low		1130
AM Official	1106-9	1128-8
Kerb close		1130-35
Open int.	9,362	
Total daily turnover	1,982	

■ LEAD ($ per tonne)

	Cash	3 mths
Close	488.5-9.5	492-2.5
Previous	506-7	508-9
High/low		507/492.5
AM Official	494-5	496.5-7.0
Kerb close		492-2.5
Open int.	37,971	
Total daily turnover	21,574	

■ NICKEL ($ per tonne)

	Cash	3 mths
Close	4855-65	4935-40
Previous	4815-25	4890-95
High/low		4950/4910
AM Official	4865-70	4950-60
Kerb close		4950-55
Open int.	71,511	
Total daily turnover	21,982	

■ TIN ($ per tonne)

	Cash	3 mths
Close	5260-70	5220-30
Previous	5225-35	5190-200
High/low		5230/5215
AM Official	5260-65	5200-10
Kerb close		5230-35
Open int.	19,123	
Total daily turnover	5,138	

■ ZINC, special high grade ($ per tonne)

	Cash	3 mths
Close	968-7	984-5
Previous	986-7	1003-4
High/low		1000/980
AM Official	975.5-6.5	993.5-4.0
Kerb close		988-9
Open int.	95,174	
Total daily turnover	39,692	

■ COPPER, grade A ($ per tonne)

	Cash	3 mths
Close	1372-73	1399-400
Previous	1368-9	1395-6
High/low		1405/1393
AM Official	1367-68	1394-95
Kerb close		1404-05
Open int.	169,272	
Total daily turnover	41,039	

■ LME AM Official £/$ rate: 1.5880
LME Closing £/$ rate: 1.6034

Spot: 1.5925 3 mths: 1.5916 6 mths: 1.5919 9 mths: 1.5926

■ HIGH GRADE COPPER (COMEX)

	Sett price	Day's change	High	Low	Vol	Open int
Apr	62.30	-0.20	62.60	62.25	349	738
May	62.75	-0.25	63.20	62.50	1,833	34,875
Jun	63.20	-0.20	63.15	63.00	24	2,083
Jul	63.55	-0.25	63.90	63.30	215	10,760
Aug	63.80	-0.25	63.90	63.90	13	1,565
Sep	64.30	-0.25	64.60	64.15	20	5,082
Total					2,482	69,223

PRECIOUS METALS

■ LONDON BULLION MARKET

(Prices supplied by N M Rothschild)

Gold(Troy oz)	$ price	£ equiv	SFr equiv
Close	278.80-279.30		
Opening	278.40-278.70		
Morning fix	278.35	174.49	259.29
Afternoon fix	278.50	175.54	259.92
Day's High	278.90-279.20		
Day's Low	278.20-278.50		
Previous close	280.20-280.70		

Loco Ldn Mean Gold Lending Rates (Vs US$)

1 month	4.19	6 months	4.12
2 months	4.17	12 months	3.74
3 months	4.16		

Silver Fix	p/troy oz.	US cts equiv.
Spot	311.89	494.50

Silver Lending Rates

1 month	3.00	6 months	1.20
2 months	2.30	12 months	0.85
3 months	2.00		

Gold Coins	$ price	£ equiv.
Krugerrand	281-285	177-179
New Sovereign	65-69	41-43

Precious Metals continued

■ GOLD COMEX (100 Troy oz.; $/troy oz.)

	Sett price	Day's change	High	Low	Vol	Open int
Apr	279.8	+1.5	280.7	278.0	343	761
May	280.8	+1.5			-	-
Jun	281.8	+1.5	282.8	280.0	22,157	127.9k
Aug	283.8	+1.5	284.5	282.3	109	9,525
Oct	285.8	+1.5	285.2	285.2	7	3,302
Dec	287.7	+1.5	288.6	286.2	105	15,848
Total					22,748	198,374

■ PLATINUM NYMEX (50 Troy oz.; $/troy oz.)

	Sett price	Day's change	High	Low	Vol	Open int
Apr	354.2	-5.4	358.5	354.0	188	912
Jul	356.2	-5.9	362.0	355.1	443	10,477
Oct	358.9	-5.9	358.5	358.0	11	1,135
Total					642	12,848

■ PALLADIUM NYMEX (100 Troy oz.; $/troy oz.)

	Sett price	Day's change	High	Low	Vol	Open int
Jun	361.00	+5.00	362.00	356.00	68	2,593
Sep	356.00	+5.00	353.00	353.00	20	224
Dec	349.00	+5.00	-	-	-	126
Mar	346.00	+5.00	-	-	-	15
Total					88	2,958

■ SILVER COMEX (5,000 Troy oz.; Cents/troy oz.)

	Sett price	Day's change	High	Low	Vol	Open int
May	494.8	+3.0	496.5	488.5	14,932	41,914
Jul	497.9	+3.1	499.5	492.5	2,410	16,282
Sep	500.1	+3.1	500.0	495.0	1,202	5,660
Dec	502.1	+3.1	503.5	497.5	622	10,222
Jan	501.5	+3.1	-	-	-	14
Mar	502.9	+3.1	-	-	60	2,450
Total					19,394	81,727

ENERGY

■ CRUDE OIL NYMEX (1,000 barrels, $/barrel)

	Latest price	Day's change	High	Low	Vol	Open int
May	16.77	-0.18	16.97	16.65	46,803	151.8k
Jun	16.77	-0.12	16.92	16.66	19,564	101.6k
Jul	16.70	-0.08	16.82	16.60	6,012	61,551
Aug	16.57	-0.07	16.64	16.50	2,954	31,022
Sep	16.41	-0.10	16.50	16.36	1,464	19,893
Oct	16.28	-0.10	16.36	16.25	1,760	18,421
Total					92,825	615,325

■ CRUDE OIL IPE ($/barrel)

	6pm price	Day's change	High	Low	Vol	Open int
May	15.02	+0.30	15.10	14.90	25,194	68,465
Jun	15.01	+0.36	15.08	14.91	22,204	88,633
Jul	14.94	+0.36	15.01	14.87	3,211	31,740
Aug	14.86	+0.35	14.89	14.80	2,645	13,422
Sep	14.82	+0.36	14.88	14.72	382	17,464
Oct	14.77	+0.34	14.80	14.69	66	9,163
Total					n/a	n/a

■ HEATING OIL NYMEX (42,000 US galls.; c/US galls.)

	Latest price	Day's change	High	Low	Vol	Open int
May	43.90	-0.12	44.15	43.40	11,154	47,343
Jun	44.00	-0.19	44.20	43.65	2,125	24,385
Jul	44.20	-0.24	44.45	44.00	1,405	16,598
Aug	44.50	-0.39	44.90	44.40	475	16,875
Sep	45.30	-0.19	45.50	45.05	388	9,260
Oct	45.90	-0.24	46.25	45.80	104	6,405
Total					17,565	171,600

■ GAS OIL IPE ($/tonne)

	Sett price	Day's change	High	Low	Vol	Open int
Apr	132.00	+2.50	132.75	130.50	9,274	22,999
May	130.75	+2.25	131.75	130.00	8,180	35,547
Jun	130.50	+1.75	131.75	130.25	1,597	24,602
Jul	131.25	+1.50	132.00	131.25	349	10,233
Aug	132.75	+1.50	132.75	132.50	64	7,724
Sep	134.50	+1.75	134.50	134.25	87	7,420
Total					18,852	157,958

■ NATURAL GAS IPE (1,000 therms; pence per therm)

May	9.150	-0.050	9.150	9.150	150	2,495
Jun	9.130	-0.070	9.130	9.120	60	1,856
Total						

■ NATURAL GAS NYMEX (10,000 mmBtu.; $/mmBtu.)

	Latest price	Day's change	High	Low	Vol	Open int
May	2.010	-0.020	2.025	1.990	29,225	52,794
Jun	2.035	-0.015	2.045	2.015	6,700	27,533
Jul	2.055	-0.015	2.065	2.040	2,551	20,120
Aug	2.075	-0.015	2.080	2.060	2,057	17,217
Sep	2.096	-0.012	2.100	2.080	1,433	17,710
Oct	2.120	-0.017	2.130	2.110	1,483	13,551
Total					49,030	288,771

■ UNLEADED GASOLINE
NYMEX (42,000 US galls.; c/US galls.)

	Latest price	Day's change	High	Low	Vol	Open int
May	53.80	-0.38	54.40	53.25	14,079	47,166
Jun	53.30	-0.43	54.00	53.05	4,314	24,057
Jul	52.70	-0.40	53.30	52.50	2,294	17,721
Aug	51.90	-0.40	52.45	51.80	1,071	7,461
Sep	50.85	-0.38	51.25	50.70	550	4,544
Oct	49.15	-0.33	49.15	49.00	3	2,638
Total					22,818	110,480

GRAINS AND OIL SEEDS

■ WHEAT LIFFE (100 tonnes; £ per tonne)

	Sett price	Day's change	High	Low	Vol	Open int
May	75.40	-	76.05	75.40	68	2,761
Jul	77.25	+0.05	77.80	77.25	56	2,340
Sep	76.50	+0.35	-	-	-	178
Nov	78.35	+0.35	78.90	78.50	15	3,027
Jan	80.15	+0.25	-	-	-	584
Total					139	9,002

■ WHEAT CBT (5,000bu min; cents/60lb bushel)

	Sett price	Day's change	High	Low	Vol	Open int
May	279.50	+0.25	281.00	273.00	6,011	38,215
Jul	288.00	+0.25	290.00	283.00	15,350	50,494
Sep	298.25	-1.50	300.00	294.00	366	6,713
Dec	314.50	-0.50	315.50	309.00	633	14,729
Mar	323.50	-0.75	325.00	320.00	32	3,259
Jul	335.75	-0.25	336.00	330.00	3	325
Total					22,397	111,739

■ MAIZE CBT (5,000 bu min; cents/56lb bushel)

	Sett price	Day's change	High	Low	Vol	Open int
May	216.25	-2.50	220.75	215.50	40,581	111,495
Jul	221.75	-3.00	226.75	221.25	16,584	110,607
Sep	228.50	-2.50	232.50	228.00	1,866	24,515
Dec	236.75	-2.50	240.75	235.75	10,508	83,839
Mar	245.75	-0.75	248.25	244.50	606	14,120
May	249.50	-2.00	252.50	248.50	94	1,082
Total					70,380	351,216

■ BARLEY LIFFE (100 tonnes; £ per tonne)

	Sett price	Day's change	High	Low	Vol	Open int
May	75.75	+0.50	-	-	-	158
Sep	74.90	+0.40	-	-	-	35
Nov	77.00	+0.50	77.00	77.00	10	380
Jan	79.00	+0.50	-	-	-	20
Mar	81.00	+0.50	-	-	-	-
May	83.00	+0.50	-	-	-	-
Total					10	593

■ SOYABEANS CBT (5,000bu min; cents/60lb bushel)

	Sett price	Day's change	High	Low	Vol	Open int
May	477.75	-4.25	484.50	477.00	24,620	55,055
Jul	486.50	-3.75	492.75	486.00	8,424	46,212
Aug	489.50	-3.75	495.50	489.25	545	14,485
Sep	493.00	-3.25	499.00	492.75	534	7,439
Nov	501.75	-4.25	507.50	501.00	8,876	34,680
Jan	512.00	-4.50	517.25	512.00	377	1,816
Total					43,461	162,128

■ SOYABEAN OIL CBT (60,000lbs; cents/lb)

	Sett price	Day's change	High	Low	Vol	Open int
May	18.04	-0.09	18.30	18.01	6,087	38,854
Jul	18.36	-0.05	18.60	18.30	4,965	33,013
Aug	18.53	-0.08	18.75	18.48	305	8,682
Sep	18.67	-0.08	18.90	18.60	325	8,841
Oct	18.82	-0.08	19.05	18.80	136	6,052
Dec	19.06	-0.10	19.30	19.00	2,145	22,254
Total					14,902	132,707

■ SOYABEAN MEAL CBT (100 tons; $/ton)

	Sett price	Day's change	High	Low	Vol	Open int
May	134.7	-2.8	137.1	134.3	4,918	37,318
Jul	136.9	-2.2	139.1	136.5	3,633	33,677
Aug	138.0	-2.2	140.5	137.9	695	12,321
Sep	139.5	-2.0	142.0	139.3	149	9,448
Oct	141.5	-1.7	143.3	141.1	239	5,125
Dec	144.4	-1.7	146.1	143.9	2,119	14,743
Total					13,484	113,607

■ POTATOES LIFFE (20 tonnes; £ per tonne)

	Sett price	Day's change	High	Low	Vol	Open int
May	260.0	-15.0	-	-	-	178
Jun	270.0	-15.0	-	-	-	-
Nov	65.0	-	-	-	-	3
Mar	103.0	-2.0	-	-	-	-
Apr	123.0	-2.0	125.0	123.0	8	239
Total					8	417

■ FREIGHT (BIFFEX) LIFFE ($10/index point)

	Sett price	Day's change	High	Low	Vol	Open int
Apr	920	-30	930	920	40	1,027
May	920	-20	925	920	13	141
Jun	875	-15	-	-	-	-
Jul	830	-5	830	830	2	562
Oct	946	-15	-	-	-	453
Total					55	2,230

	Close	Prev
BFI	883	891

PULP AND PAPER

■ PULPEX OMLX (US$; 24 air dry tons)

	Sett price	Day's change	High	Low	Vol	Open int
Jun	457.50	+2.00	-	-	-	517
Sep	477.50	+2.50	-	-	-	127
Total					0	645

FUTURES DATA
All futures data supplied by CMS

Minor Metals from Metal Bulletin
European free market, $ per pound in warehouse. Antimony: 99.65%, $ per tonne, 1,290-1,350. Bismuth: MB Free Mkt. 3.10-3.18 (3.10-2.18). Cadmium: min. 99.95%, cents a pound, 20-24. Cobalt: min. 99.8%, 16.00-17.00 (17.00-18.00). min. 98.3%, 13.90-15.30 (14.50-15.80). Mercury: min. 99.99%, $ per 76 pound flask, 135-143. Molybdenum: drummed molybdic oxide, 2.75-2.90 (2.70-2.85). Selenium: min. 99.5%, 1.50-2.40. Tungsten ore: 33-44. Uranium: Nuexco, unrestricted exchange value 8.50. Vanadium: min. 98%, 2.05-2.20 (2.10-2.20).

SOFTS

■ COCOA LIFFE (10 tonnes; £/tonne)

	Sett price	Day's change	High	Low	Vol	Open int
May	816	-2	819	805	1,843	45,932
Jul	833	-1	837	821	767	17,202
Sep	850	-2	853	841	780	27,853
Dec	874	-	876	864	183	26,619
Mar	897	+1	898	885	248	18,092
May	916	+1	917	906	136	17,014
Total					3,982	181,506

■ COCOA CSCE (10 tonnes; $/tonnes)

	Sett price	Day's change	High	Low	Vol	Open int
May	1149	-2	1162	1142	2,608	23,739
Jul	1177	-2	1189	1171	1,692	16,643
Sep	1206	-6	1218	1201	198	8,870
Dec	1249	-5	1260	1242	289	8,370
Mar	1287	-8	1287	1282	36	6,609
May	1312	-8	-	-	-	3,877
Total					4,883	66,788

■ COCOA (ICCO) (SDR's/tonne)

Apr 5	Price	Prev. day
Daily	n/a	931.47

■ COFFEE LIFFE (5 tonnes; $/tonne)

	Sett price	Day's change	High	Low	Vol	Open int
May	1523	-16	1525	1514	2,006	27,939
Jul	1525	-20	1533	1516	2,596	15,796
Sep	1536	-21	1546	1529	307	6,793
Nov	1549	-21	1560	1545	76	2,008
Jan	1552	-21	1550	1550	8	546
Mar	1552	-21	-	-	-	128
Total					4,993	53,210

■ COFFEE 'C' CSCE (37,500lbs; cents/lbs)

	Sett price	Day's change	High	Low	Vol	Open int
May	106.40	-0.95	107.70	105.80	4,306	16,785
Jul	108.00	-0.75	109.00	107.50	887	11,420
Sep	109.60	-0.90	110.75	109.25	977	5,308
Dec	111.00	-1.00	111.25	110.75	357	3,494
Mar	112.25	-0.80	112.75	112.00	430	1,222
May	113.70	-0.85	-	-	2	109
Total					7,331	38,366

■ COFFEE (ICO) (US cents/pound)

Apr 6		Prev. day
Comp. daily	90.01	91.37
15 day average	89.32	89.30

■ WHITE SUGAR LIFFE (50 tonnes; $/tonne)

	Sett price	Day's change	High	Low	Vol	Open int
May	197.9	-0.5	199.5	195.6	2,535	17,787
Aug	191.1	-1.7	193.0	189.0	954	19,115
Oct	188.8	-1.2	190.1	186.9	192	12,275
Dec	190.9	-1.6	191.9	188.9	151	5,044
Mar	197.4	-1.1	198.0	197.7	110	3,214
May	199.4	-1.6	-	-	-	1,566
Total					3,942	59,168

■ SUGAR '11' CSCE (112,000lbs; cents/lbs)

	Sett price	Day's change	High	Low	Vol	Open int
May	5.63	+0.01	5.64	5.43	6,015	67,334
Jul	5.38	-	5.39	5.17	3,924	55,030
Oct	5.83	-	5.84	5.64	2,077	33,155
Mar	6.43	+0.02	6.43	6.28	154	19,399
May	6.49	+0.02	6.40	6.40	1	3,212
Jul	6.57	-0.02	6.50	6.50	8	2,146
Total					12,178	181,847

■ COTTON NYCE (50,000lbs; cents/lbs)

	Sett price	Day's change	High	Low	Vol	Open int
May	60.81	+0.72	61.00	59.70	3,885	21,193
Jul	60.85	+0.45	61.10	60.00	1,793	15,449
Oct	60.05	+0.35	60.50	59.50	40	1,786
Dec	59.40	+0.29	60.10	59.10	516	16,131
Mar	60.70	+0.25	61.00	60.30	6	3,306
May	61.05	+0.20	61.30	61.30	-	1,308
Total					6,240	59,744

■ ORANGE JUICE NYCE (15,000lbs; cents/lbs)

	Sett price	Day's change	High	Low	Vol	Open int
May	83.70	+0.50	83.90	82.65	1,393	16,931
Jul	84.25	+0.35	84.50	83.50	452	5,802
Sep	85.75	+0.60	85.90	85.25	4	2,633
Nov	87.25	+0.25	87.25	87.00	144	2,675
Jan	88.65	+0.15	88.75	88.75	76	2,226
Mar	90.65	+0.15	91.00	91.00	2	318
Total					2,071	30,614

VOLUME DATA
Open Interest and Volume data shown for contracts traded on COMEX, NYMEX, CBT, NYCE, CME, CSCE and IPE Crude Oil are one day in arrears. Volume & Open Interest totals are for all traded months.

INDICES

■ Reuters (Base: 18/9/31 = 100)

Apr 6	Apr 1	month ago	year ago
1336.0	1340.3	1352.6	1656.7

■ CRB Futures (Base: 1967 = 100)

Apr 5	Apr 1	month ago	year ago
191.15	191.27	-	-

■ GSCI Spot (Base: 1970 = 100)

Apr 5	Apr 1	month ago	year ago
153.92	152.88	137.22	166.72

LME WAREHOUSE STOCKS (tonnes)

Aluminium	-450	to	817,350
Aluminium alloy	-40	to	68,820
Copper	+450	to	722,425
Lead	+25	to	102,950
Nickel	+126	to	60,840
Zinc	+276	to	304,750
Tin	-80	to	8,975

MEAT AND LIVESTOCK

■ LIVE CATTLE CME (40,000lbs; cents/lbs)

	Sett Price	Day's change	High	Low	Vol	Open int
Apr	67.875	+0.225	68.050	67.575	9,318	24,213
Jun	65.300	+0.075	65.500	64.775	6,165	45,966
Aug	63.350	-0.125	63.475	63.175	1,907	19,943
Oct	65.475	-0.100	65.625	65.325	633	10,961
Dec	67.250	-0.125	67.450	67.200	272	5,333
Feb	68.475	-0.150	68.500	68.450	175	1,920
Total					18,608	108,084

■ LEAN HOGS CME (40,000lbs; cents/lbs)

	Sett Price	Day's change	High	Low	Vol	Open int
Apr	43.600	+0.225	43.850	43.150	1,978	6,743
Jun	54.900	+0.800	55.200	54.250	4,639	16,502
Jul	56.450	+0.600	56.650	55.600	1,207	5,508
Aug	56.300	+0.300	56.600	56.000	371	5,482
Oct	54.475	-0.125	54.900	54.275	160	6,879
Dec	54.575	-0.125	54.800	54.400	55	3,333
Total					8,422	45,294

■ PORK BELLIES CME (40,000lbs; cents/lbs)

	Sett Price	Day's change	High	Low	Vol	Open int
May	52.550	+1.275	52.750	51.400	535	2,987
Jul	53.325	+1.025	53.750	52.500	171	1,360
Aug	52.375	+1.300	52.750	52.000	31	436
Total					739	4,783

LONDON TRADED OPTIONS

Strike price $ tonne	— Calls —		— Puts —	
■ ALUMINIUM (99.7%) LME	May	Aug	May	Aug
1250	22	58	32	48
1300	7	34	66	76
1350	2	20	111	110
■ COPPER (Grade A) LME	May	Aug	May	Aug
1350	57	103	18	41
1400	29	76	41	63
1450	13	54	74	90
■ COFFEE LIFFE	May	Jul	May	Jul
1500	242	47	1	24
1550	192	23	1	50
1600	142	10	1	87
■ COCOA LIFFE	May	Jul	May	Jul
800	27	55	11	22
825	14	41	23	33
850	6	29	40	46
■ BRENT CRUDE IPE	May	Jun	May	Jun
1400	-	134	10	29
1450	-	-	13	47
1500	25	-	36	-

LONDON SPOT MARKETS

■ CRUDE OIL FOB (per barrel)

		+or-
Dubai	$14.42-4.53	+0.275
Brent Blend (dated)	$14.46-4.49	+0.225
Brent Blend (May)	$15.02-5.05	+0.235
W.T.I	$16.77-6.79x	+0.29

■ OIL PRODUCTS NWE prompt delivery CIF (tonne)

Unleaded Gasoline ‡	$164-166	+2
Gas Oil	$134-135	+3
Heavy Fuel Oil	$66-68	
Naphtha	$137-139	+2
Jet fuel	$156-157	+5
Diesel	$142-146	+2.5

■ NATURAL GAS (Pence/therm)

Bacton (Apr)	9.15-9.20	+0.025

Petroleum Argus. Tel. London (0171) 359 8792

■ OTHER

Gold (per troy oz)♣	$279.05	-1.40
Silver (per troy oz)♣	494.50	-6.50
Platinum (per troy oz.)	$354.25	-4.75
Palladium (per troy oz.)	$359.00	+10.00
Copper	68.0c	+1.0
Lead (US prod.)	45.00c	
Tin (Kuala Lumpur)	19.55r	-0.10
Tin (New York)	249.5	
Cattle (live weight)	94.62p	+1.62*
Sheep (live weight)	104.80p	+4.35*
Pigs (live weight)†	61.30p	+1.57*
Lon. day sugar (raw)	$150.40	-4.00
Lon. day sugar (wte)	$210.90	-2.60
Barley (Eng. feed)	Unq	
Maize (US No3 Yellow)	£97.00	+1.00
Wheat (US Dark North)	£122.00	
Rubber (May)♥	42.00p	+0.25
Rubber (Jun)♥	42.50p	+0.25
Rubber (KL RSS No1)	229.50m	+2.00
Coconut Oil (Phil)§	740.0	
Palm Oil (Malay.)§	490.0y	
Copra (Phil)§	460.0z	
Soyabeans (US)	147.0y	
Cotton Outlook'A' index	56.80	
Wooltops (64s Super)	302p	

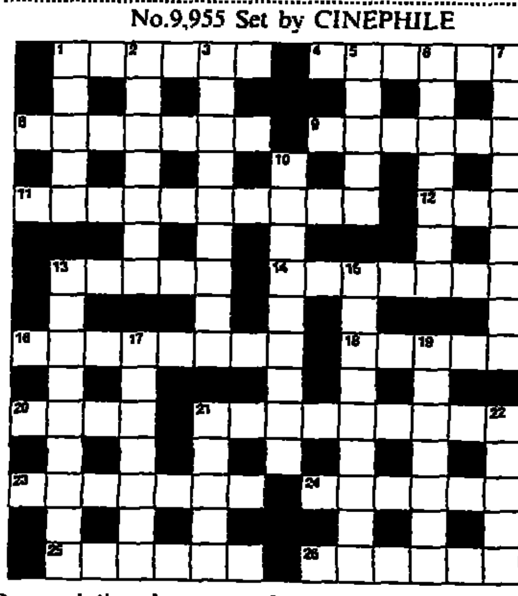
£ per tonne unless otherwise stated. p pence/kg. c cents/lb. r ringgit/kg. m Malaysian cents/kg. y Mar/Apr. z Mar. ♥ London Physical. § CIF Rotterdam. ♣ Bullion market close. * Change on week. ‡Based on 1 Unleaded Gasoline replaced Premium on March 15th. †61 being of pigs sold.

JOTTER PAD

For solutions to today's crossword call 0906 843 0060. Calls cost 60p a minute.

CROSSWORD

No.9,955 Set by CINEPHILE



Down solutions have crossed the water

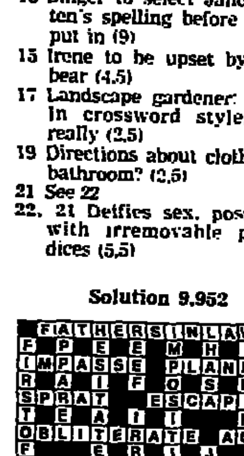
ACROSS

1 I believe it's time for robbery (6)
4 About a hundred had been secret agents, which gave zest (6)
8 Snoop around – there's zero accurate information, children (7)
9 Effort to atone for removing the last from Cornish town (7)
11 Heard to say solemnly, in great fear, "Land!" (5,5)
12 Run from thunder (4)
13 I believe it's dangerous in company (5)
14 This shows me Benn and lo! he's no more one of them (8)
16 Summoned necromantically or into service (6,2)
18 The ego as subject (5)
20 KO: reverse is far from OK (4)
21 Intimacy is right when devil-craft's around (10)
23 Bust, sadly, to some extent, which conveys a further message (7)
24 Wee thing in cover may have company (7)
25 Extremely pointed on the back of the paper (4,2)
26 Niche with no sitting (6)

DOWN

1 See 5
2 Look out of the kitchen garden (2,5)
3 Gave tongue back to instincts – it's a reptilian quality (4-5)
5, 1 Boy keeping date and place (4-1-5)
6 Kept out of the fridge? March and be damned! (7)
7 Remove round column which is low-cut (9)
10 Formula 1 cost £1,000? (5,4)
13 Singer to select Jane Austen's spelling before being put in (9)
15 Irene to be upset by bugbear (4,5)
17 Landscape gardener: ours? In crossword style, not really (2,5)
19 Directions about clothes in bathroom? (2,5)
21 See 22
22, 21 Deifies sex, possibly, with irremovable prejudices (5,5)

Solution 9,952



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FT MANAGED FUNDS SERVICE

● FT Cityline Unit Trust Prices are available over the telephone. Call the FT Cityline Help Desk on (+44 171) 873 4378 for more details.

OFFSHORE AND OVERSEAS

BERMUDA (FSA RECOGNISED)

BERMUDA (REGULATED)(**)

CAYMAN ISLANDS (REGULATED)(**)

GUERNSEY (REGULATED)(**)

GUERNSEY (FSA RECOGNISED)

IRELAND (REGULATED)(**)

IRELAND (FSA RECOGNISED)

ISLE OF MAN (FSA RECOGNISED)

ISLE OF MAN (REGULATED)(**)

Offshore Funds and Insurances

FT MANAGED FUNDS SERVICE

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JERSEY (FSA RECOGNISED)

[illegible]

LUXEMBOURG (FSA RECOGNISED)

[illegible]

JERSEY (REGULATED)(**)

[illegible]

LUXEMBOURG (REGULATED)(**)

[illegible]

OFFSHORE INSURANCES

[illegible]

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هكذا من الأصل

FT MANAGED FUNDS SERVICE

Offshore Insurances and Other Funds

● FT Cityline Unit Trust Prices are available over the telephone. Call the FT Cityline Help Desk on (+44 171) 873 4378 for more details.

Fund	Selling Price	Buying Price	+ or -	Yield Gross
Albany International Assurance Ltd - Contd.				
Allied Dunbar International Assce Ltd (z)				
43-51 Athol Street, Douglas, IoM 01624 661551				
CMI Insurance Co Ltd				
Clerical Medical Hse, Douglas I.O.M. (00) 44 1624				
Old Mutual International (Guernsey) Ltd.				
PO Box 121, St. Peter Port Guernsey 01481 726726				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

OTHER OFFSHORE FUNDS

● MANAGED FUNDS NOTES

[illegible]

LONDON SHARE SERVICE

AEROSPACE & DEFENCE

AUTOMOBILES

BANKS

BEVERAGES

CHEMICALS

CONSTRUCTION & BUILDING MATERIALS

CONSTRUCTION & BUILDING MATERIALS - Continued

DISTRIBUTORS

DIVERSIFIED INDUSTRIALS

ELECTRICITY

ELECTRONIC & ELECTRICAL EQUIPMENT

ENGINEERING & MACHINERY

ENGINEERING & MACHINERY - Continued

FOOD & DRUG RETAILERS

FOOD PRODUCERS & PROCESSORS

FOOD PRODUCERS & PROCESSORS - Continued

FORESTRY & PAPER

GAS DISTRIBUTION

GENERAL RETAILERS

HEALTH

HOUSEHOLD GOODS & TEXTILES

HOUSEHOLD GOODS & TEXTILES - Continued

INFORMATION TECHNOLOGY HARDWARE

INSURANCE

INVESTMENT COMPANIES

INVESTMENT COMPANIES - Continued

INV TRUSTS SPLIT CAPITAL

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هكذا من الاصل

LONDON SHARE SERVICE

INV TRUSTS SPLIT CAPITAL - Continued

MINING - Continued

REAL ESTATE - Continued

SPECIALITY & OTHER FINANCE - Continued

TRANSPORT - Continued

AIM - Continued

Net asset values supplied by Lipper as a guide only. See guide to London Share Service

LEISURE, ENTERTAINMENT & HOTELS

OIL & GAS

STEEL & OTHER METALS

	Notes	Price	+ or -	52 week high	52 week low	Volume '000s	Yield	P/E
ASW		13½	—	34¼	9½	228	—	Φ
Apollo Metals	♣	109	+½	138½	70½	40	4.8	8.1
Ash & Lacy	♣	115½xd	—	176½	90	—	7.1	Φ
Brit Steel		123¾	−¾	172	85½	2,687	8.1	10.9
Coban (A)		118	—	420	92½	—	—	—
Firth	♣	17¾	—	40	15½	26	1.7	20.4
For Johnson Matthey see section Chemicals								
Kelsey Inds.		337½	—	435	250	—	8.9	5.8
Kobe Steel Y		46½	−½	63¼	35¾	—	2.2	—
Manganese Bro	♣	198xd	—	509½	178½	—	5.5	10.5
Precoat Int'l	♣	127½	—	236½	119½	—	5.2	7.6
Richardson West	♣	34½	—	97½	25	0.308	4.6	Φ

WATER

AMERICANS

CANADIANS

SOUTH AFRICANS

	Notes	Price	+ or -	52 week high	52 week low	Volume '000s	Yield	P/E
Barlow R.	♣	[illegible]	—	[illegible]	[illegible]	—	3.7	7.6
Investec Group		£23½	+⅛	[illegible]	[illegible]	—	—	—
Investec Hldgs		£21½	+⅛	[illegible]	[illegible]	—	—	—
Standard Bank R		[illegible]	—	[illegible]	[illegible]	—	2.9	—
Tiger Oats		625	—	950	375	—	2.9	12.3
Tongaat-Hulett R		362	+1¼	745¼	287¼	—	5.8	6.5

TRADED INDEX SECURITIES

	Notes	Price	+ or -	52 week high	52 week low	Volume '000s	Yield	P/E
FTSE 100 TRANS.		[illegible]	—	£63450	£47700	—	—	—

REAL ESTATE - Continued

SUPPORT SERVICES

AIM

Alternative Investment Market

The Alternative Investment Market, designed primarily for small companies, is regulated by the London Stock Exchange but has less demanding rules than the SE Official list.

	Notes	Price	+ or -	52 week high	52 week low	Volume '000s	Yield	P/E
10 Group		1	—	3¼	0¾	—	—	Φ
AFA Systems		97½	—	191	74½	—	—	Φ
AMCO		94	—	139½	91½	—	7.8	Φ
ATA		95	—	157½	93½	—	6.1	7.7
Adval Group		44½	—	67½	44½	—	—	7.6
Access Plus	♣	245xd	—	290	175	—	2.4	19.0
African Gold	♣	2¼	+¼	6¼	2	—	—	—
Albemarle & Bond	♣†	70xd	+1	95½	55½	—	1.8	17.9
Alizyme	♣	32	—	42½	24	—	—	—
Ambient Media		59½	—	102½	42½	—	—	—
Ambishus Pub Co	♣	107½	—	280	88½	—	—	13.9
Anglo Siberian Oil Co.		89	—	108½	85½	—	—	Φ
Anglo-Welsh	♣	99½	—	119	72½	—	3.9	Φ

LIFE ASSURANCE

PACKAGING

RESTAURANTS, PUBS & BREWERIES

MEDIA & PHOTOGRAPHY

PERSONAL CARE & HOUSEHOLD PRODUCTS

SOFTWARE & COMPUTER SERVICES

PHARMACEUTICALS

TELECOMMUNICATIONS SERVICES

TOBACCO

REAL ESTATE

TRANSPORT

MINING

SPECIALITY & OTHER FINANCE

	Notes	Price	+ or -	52 week high	52 week low	Volume '000s	Yield	P/E
Virtual Internet		167½	+3½	381½	145	—	—	—
Voss Net		172½	−9	198½	41½	—	—	—
WIR	♣	27½	—	65½	27½	—	—	27.0
Weather Action		28½	—	97½	27½	—	—	—
Weeks Group	♣	3	—	4½	1½	—	3.7	13.0
West 175 Ests	♣	81½	—	87	42	—	—	—
West Bromwich Albion		£100	−5	£145	£95	—	—	11.6
Western Select	♣	8¼	—	13	7¾	—	3.0	27.4
Westmont Energy	♣	24½	—	300	17½	—	—	Φ
Willington		60	—	65	60	—	8.0	2.4
Winchester		98½	—	112½	55½	—	—	51.6
World Telecom	♣	68	—	285	35	—	—	—
XKO		153	−6	178	111½	—	—	—
Xpertise		29½	—	42½	24½	—	—	—
Yeoman		61½	—	81½	51½	—	—	Φ

GUIDE TO LONDON SHARE SERVICE

Prices and trading volumes for the London Share Service are delivered by Financial Times Information.

Company classifications are based on those used for the FTSE Actuaries Share Indices.

Closing mid-prices are shown in pence unless otherwise stated. For FTSE 100 index constituents and reserves contained in the Trading Volume table on the LSE page, last trade prices at or prior to 4.30pm market close are shown, as these shares are now traded on the Stock Exchange Electronic Trading System ("SETS"). Highs and lows are based on intra-day mid-prices/last trades over a rolling 52 week period.

Trading Volumes are end of day accumulated totals. Dashes indicate that either no trade has taken place during the day or the data is not available for those particular securities. Volumes shown for foreign securities are based on London trading.

Where stocks are denominated in currencies other than sterling, this is indicated after the name. Prices shown for some of these foreign securities are converted into sterling from latest available local Stock Exchange prices.

Symbols referring to dividend status appear in the notes column daily as a guide to yields and P/E ratios. Dividends and Dividend covers are published on Monday.

Earnings used in calculations are based on IIMR 'Headline Earnings' formula.

Price/earnings ratios are based on latest annual reports and accounts and, where possible, are updated on interim figures.

Yields are based on mid-prices, are gross, adjusted for a dividend tax credit of 20 per cent (except where payment is due after 6/4/99 when no tax credit will be applied) and allow for the value of declared distribution and rights.

Estimated Net Asset Values (NAVs) are shown for Investment Trusts, in pence per share, along with the percentage discounts (Dis) or premiums (Pm −) to the current closing share price. The NAV basis assumes prior charges at par value, convertibles converted and warrants exercised if dilution occurs.

- Highs and lows marked thus have been adjusted to allow for capital changes
- † Interim since increased or resumed
- ‡ Interim since reduced, passed or deferred
- Φ Figures or report awaited
- ♥ Rule 2.1(a)(iv) Overseas incorporated companies listed on an approved exchange.
- ♣ Free annual/interim report available, see details below.
- ‡‡ Rule 4.2(a) Irish incorporated non-listed companies.
- # Price at time of suspension
- : Indicated dividend yield after pending scrip and/or rights issue
- ♦ Merger bid or reorganisation in progress
- § Forecast dividend yield; p/e based on earnings updated by latest interim statement.
- ♠ Unregulated collective investment scheme.

a Yield based on annualised dividend
b Figures based on prospectus or other official estimates.
f Dividend/yield adjusted for complex issue
g Assumed dividend yield after rights issue.
h Assumed dividend yield after scrip issue.
n Rights issue pending
q Earnings based on preliminary figures
s Dividend yield excludes a special payment.
t Indicated dividend yield, p/e ratio based on previous year's earnings
v Dividend/yield includes amount payable after 6/4/99
z Dividend yield includes a special payment
F Yield based on prospectus or other official estimates for 1998-99.
G Assumed yield after pending scrip and/or rights issue.
H Yield based on prospectus or other official estimates for 1999.
K Yield based on prospectus or other official estimates for 1999-2000.
M Yield based on prospectus or other official estimates for 1999-2000.
‡‡ Dividend is paid in whole or part as a FID (Foreign Income Dividend)
P Dividend/yield adjusted for consolidation or share split
R Forecast annualised yield, p/e based on prospectus or other official estimates.
W Pro forma figures.
Z Dividend yield to date.

Abbreviations:
xd ex dividend; xc ex scrip issue; xr ex rights; xa ex all; xs ex capital distribution.

This service is available to companies whose shares are regularly traded in the United Kingdom for a fee of £3570 a year for each security shown, subject to the Editor's discretion.

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For Retail Price Index details call 0906 843 0605

The FT web site

London share prices are available throughout the trading day with a 20 minute delay from our web site, http://www.ft.com, which also has the closing share prices printed on these pages.

LONDON STOCK EXCHANGE

Rampaging bulls drive Footsie to record highs

MARKET REPORT

By Steve Thompson, UK Stock Market Editor

The first trading session of the new financial year saw London's leading stocks move confidently into record territory, propelled by optimism over Wall Street and the prospect of interest rate cuts in the UK and the euro-zone.

If that was not enough to satisfy the market's rampant bulls, there was another burst of takeover stories and evidence of a last-minute rush for the final year of personal equity plans.

Dealers said Wall Street provided the initial impetus behind yesterday's performance, with the Dow Jones Industrial Average finishing above 10,000 overnight in response to support for high-tech stocks and to the March non-farm payroll report published on Friday.

That report showed a significant slowdown in the rate of growth in new jobs in the US, where unemployment is at its lowest for 29 years, indicating a cooling in the economy and reducing the need for a rise in interest rates in the short term.

Wall Street gave no further support to global markets yesterday, opening the session on a modestly firmer note, only to succumb to profit-taking despite the mid-afternoon ceasefire announced by the Serb government. That produced a short-lived rally in the Dow.

At the finish of a day of sustained strength, the FTSE 100 remained above the 6,400 barrier at 6,415.3, up 85.3. The index hit a record intra-day high of 6,443.9, up 113.9, before reacting to pulses of profit-taking and the halt to Wall Street's upward march.

But dealers pointed to the reluctance of the rest of the market to follow the leaders as evidence that the latest surge in the Footsie owed as much to a stock shortage as to heavy buying interest.

The FTSE 250, although always in positive territory, was never really convincing, despite the numerous takeover rumours, and ended the day only 3.4 firmer at 5,456.7, having hit a session high of 5,472.4. The FTSE SmallCap closed 2.0 higher at 2,407.0, after 2,408.1.

The two junior FTSE indices considerably outperformed the FTSE 100 and the All-Share during March and the first quarter.

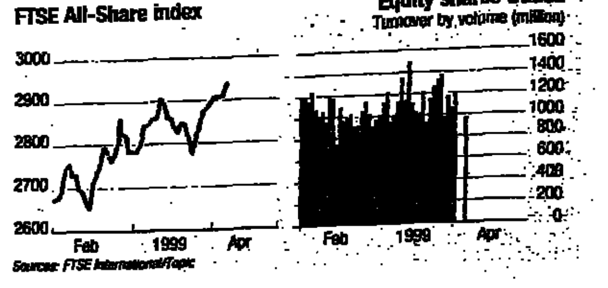
Over the month, the FTSE SmallCap produced a total return of 5.9 per cent, compared with the 250's 4.9 per cent, the All-Share's 3.1 per cent and the 100's 2.6 per cent.

The figures are even more dramatic over the first quarter when the SmallCap returned 16.7 per cent, the 250 13.7 per cent, the All-Share 9.1 per cent and the 100 7.9 per cent.

Marketmakers conceded they had been caught out by the speed of the US market's move in recent sessions and especially on Monday, and also by the weight of new money. "I would be surprised if we came back by any significant amount in the short term; the market feels very strong underneath," said one.

The strategy team at Credit Suisse First Boston said: "There appears little to stop a further re-rating of UK equities. We see this driving equities well into overbought territory. Our strategy then would be to take profits in some of the highly rated big-cap stocks."

Turnover was 980m shares.



Sources: FTSE International/Topic

Indices and ratios

FTSE 100	6415.3	+85.3
FTSE 250	5456.7	+3.4
FTSE 350	3037.9	+34.7
FTSE All-Share	2938.28	+32.06
FTSE All-Share yield	2.29	2.60
FT 30	3873.3	+34.5
FTSE Non-Fins p/e	25.98	25.14
FTSE 100 Fut Mar	6187.5	-107.0
10 yr Gilt yield	4.67	4.68
Long gilt/equity yld ratio	2.01	1.82

Best performing sectors

1 Telecommunications +4.0
2 Retailers: General +2.7
3 Insurance +2.4
4 Services +2.0
5 Media +2.0

Worst performing sectors

1 Gas Distribution -3.9
2 Building Matls & Merchs -2.4
3 Water -1.7
4 Utilities -1.4
5 Paper: Pckg & Printing -1.1

Telecoms stay in spotlight

COMPANIES REPORT

By Joel Kibazo and Martin Brice

A combination of bumper subscription figures, talk of corporate activity and bid speculation ensured the spotlight remained firmly fixed on the telecoms sector.

Telewest Communications surged 19, or nearly 7 per cent, to 296¼p in heavy trade of 14m after **Cable & Wireless** admitted it was exploring options for its UK cable interests that could involve a merger with Telewest.

A press report had earlier suggested the plan involves C&W absorbing the corporate operations of **Cable & Wireless Communications** (CWC) in which it has a 53 per cent stake. CWC would cease to exist as a separate company.

There was also talk suggesting Telewest could soon be on the receiving end of a bid from another group. "I can easily see a bid for Telewest given the current climate in the sector," a broker said. CWC shares jumped 36½ to 754½p while those of C&W improved 23½ to 775½p.

It was the publication of bumper first-quarter subscription data that gave a boost to mobile telephone operators.

Orange, which said it had gained a net 370,000 new UK customers in the first quarter of this year, taking its total UK customer base to 2.5m, jumped 34 to 928p. **Vodafone Group** confirmed recent predictions saying it had added 700,000 net new customers to its UK network in the three months to the end of March compared with 72,000 a year earlier. It now has 5.57m UK customers and the shares rose 24 to £12.06.

John Tyce at SG Securities said the subscription figures supported the broker's positive stance on the sector as a whole. He favours Vodafone saying: "Vodafone remains top of the pile. The merger benefits and global reach puts it a class apart. This is a business that benefits from scope and scale and Vodafone has those key factors."

The favourable subscription figures also helped lift **BT**, joint owner with **Securicor** of mobile telephone operator Cellnet. The former put on 54 to £10.82 while the latter hardened 5 to 573p.

An initially strong upward move by shares in **Pearson**, owner of the Financial Times, was later reversed as Collins Stewart, the stockbroker, pinpointed an uncomfortable element in Pearson's report and accounts and shifted its stance on the stock from "buy" to "take profits".

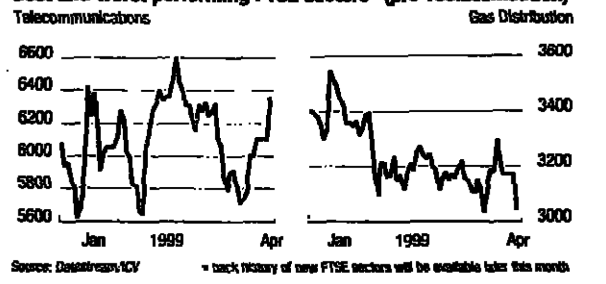
Michael Savage, media specialist at Collins Stewart, said Pearson's report and accounts revealed that operating profits at Simon & Schuster, Pearson's newly-acquired US publishing business, for the period January 1 to November 27 1998 of £54m "were significantly below expectations compared with the £157m for the full calendar year 1997. This produces an element of doubt on the core basis of the division's profitability."

The analyst conceded that the 1998 figures were based on just 11 months and that December "is apparently a good sales month". But he said the ability of S&S's profits to rise from £54m in 11 months in 1998 to an estimated £180m this year (including cost savings) must be open to doubt. Pearson shares closed a net 40 lower at £13.65, having hit £14.25.

It was a lacklustre debut for **AstraZeneca**, the newly merged pharmaceuticals giant that started trading in its new form in London and Stockholm yesterday. Recent buying of the shares by tracker funds ahead of the merger yesterday prompted a wave of profit-taking that coincided with a dividend payout yesterday.

Dealers suggested much of the selling had been triggered by a more cautious medium-term outlook by some analysts One said: "The uncertainty over the expiry of some of the company's key patents including Losec [the ulcer treatment] in the next few years has raised some concern."

Talk of impending corporate activity at **Glaxo Wellcome** saw the shares improve 56 to £22.14. A sector specialist said: "Glaxo Wellcome's current list of drugs is not enough to grow the sales base. A corporate deal is clearly needed."



Source: Datastream/ICV * back history of new FTSE sectors will be available later this month

Dixons stars

Electronic goods retailer **Dixons Group** was the best performer in the FTSE 100, the shares appreciating 111 to £14.16 boosted by overnight strength in US internet stocks and a prediction by retail consultants Verdict that spending on electrical goods was likely to rise.

The profits warning from former star performer **Jarvis** knocked the stock to levels not seen since the dramatic falls in markets caused by Asian troubles last October.

The facilities management and rail maintenance group suffered one of the worst performances in the market as it lost almost 12 per cent, or 64½ to 478p.

The damage was caused by a series of downgrades by analysts after the company said it would not meet expectations for the year that ended last week. Downgrades were in the order of 11 per cent, with joint house broker Peel Hunt coming down from £62.7m to £56m, while Charterhouse Securities moved its figure from £58m to £54m before amortisation of goodwill, estimated at £47m. HSBC moved from £62m to £55m.

The factors behind the warning were not expected to continue this year, and analysts were not significantly downgrading forecasts for this year.

The sorry performance by Jarvis contrasted with the good day enjoyed by **WS Atkins**, which operates in similar markets. It gained 27½ to 437½p after a series of year-end meetings with analysts. Henderson Crosthwaite has upgraded its forecast for earnings per share by 7.5 per cent to 23p for the year just ended.

Dealers in publishing group **Reed International** were braced for a tough session today after an announcement after yesterday's market close that the company had terminated talks with its lead candidate to take over as chief executive.

Shares in **Monument Oil & Gas** firmed 5 to 47¾p after announcing it had been approached by **Lasmo** which last week called off its prolonged merger talks with **Enterprise Oil**. Lasmo shares eased a penny to 127¾p while those of Enterprise, initially rumoured to also have an interest in acquiring Monument, improved 5¼ to 364¾p.

The agreed £43.5m bid for **Tie Rack** from Frangi Investments of Italy, valuing the shares at 43½p, saw the stock climb 7½ to 42½p.

FT 30 INDEX

	Apr 6	Apr 1	Mar 31	Mar 30	Mar 29	Yr ago	*High	*Low
FT 30	3873.3	3838.8	3835	3802.9	3804	3646.5	4004.9	2790.6
Ord. div. yield	2.65	2.69	2.70	2.73	2.74	2.84	4.22	2.72
P/E ratio net	23.73	23.40	23.35	23.10	23.14	24.96	25.41	15.80
P/E ratio nil	23.67	23.33	23.28	23.04	23.08	24.74	25.19	15.71

FT 30 since compilation: high 4004.9 7/15/98; low 49.4 6/26/40. Base Date: 1/7/35.

FT 30 hourly changes

9	10	11	12	13	14	15	16	High	Low
3838.8	3891.2	3887.8	3887.0	3889.7	3901.6	3902.6	3900.4	3904.7	3838.8

STOCK MARKET TRADING DATA

	Apr 6	Apr 1	Mar 31	Mar 30	Mar 29	Yr ago
SEAQ bargains	102,707	108,789	97,705	92,879	89,317	n/a
Equity turnover (£m)†	-	4324.9	4182.2	4204.1	5192.1	n/a
Equity bargains†	-	85,664	80,961	77,589	75,614	n/a
Shares traded (m)†	-	925.2	10101.8	998.0	1138.3	n/a
Total market bargains‡	-	103,470	96,842	91,466	85,884	-
Total turnover (£m)‡	-	6017.6	6070.3	5835.0	6830.3	-
Total shrs traded (m)‡	973*	1196.5	1333.0	1287.2	1424.8	-
Tradepoint turnover (£m)	21.0	28.8	29.4	20.8	16.3	101.2
Tradepoint shrs traded(m)	9.7	11.4	11.7	8.8	7.2	21.6

†Excluding intra-market and overseas turnover but including Crest turnover. *UK only total at 6pm. ‡ UK plus intra-market turnover.

■ London market data

Rises and falls*		52 Week highs and lows		LIFFE Equity options	
Total Rises	944	Total Highs	111	Total contracts	42,691
Total Falls	566	Total Lows	24	Calls	25,044
Same	1,343			Puts	17,647

Apr 6 *Data based on Equity shares listed on the London Share Service.

FUTURES AND OPTIONS

■ FTSE 100 INDEX FUTURES (LIFFE) £10 per full index point

	Open	Sett price	Change	High	Low	Est. vol	Open int.
Jun	6415.0	6460.0	+105.0	6490.0	6395.0	32150	196005
Sep	-	6505.0	+106.0	-	-	0	3973
Dec	-	6558.0	+106.0	-	-	0	201

■ FTSE 250 INDEX FUTURES (LIFFE) £10 per full index point

	Open	Sett price	Change	High	Low	Est. vol	Open int.
Jun	-	5457.0	+4.0	-	-	0	7360

■ FTSE 100 INDEX OPTION (LIFFE) (*6415) £10 per full index point — Apr 6

	6250 C	6250 P	6300 C	6300 P	6350 C	6350 P	6400 C	6400 P	6450 C	6450 P	6500 C	6500 P	6550 C	6550 P	6600 C	6600 P
Apr	211½	30½	172½	40½	138	53½	104	71	78	100	54	127	35	158	22½	195
May	313	119½	276½	132	244½	151	214	170½	184	190	154½	212	132½	239½	110½	267½
Jun	377	171	346½	190	318	209	294	226½	263½	248	223	267½	198½	293½	176	321
Jul	435½	214	406½	233	377½	252½	348½	272	320	292	291½	312	266½	337½	240½	366
Dec†			667½	430			608	469			548½	509			483	555

Calls 8,166 Puts 1,752

■ EURO STYLE FTSE 100 INDEX OPTION (LIFFE) £10 per full index point — Apr 6

	6275 C	6275 P	6325 C	6325 P	6375 C	6375 P	6425 C	6425 P	6475 C	6475 P	6525 C	6525 P	6575 C	6575 P	6625 C	6625 P
Apr	180½	32	140	44½	115½	80½	86½	81½	62½	107½	43½	138½	29	174	18	213½
May	286	117½	253	133½	220½	151	198	175	167½	197½	141	220½	118	248	100½	279
Jun	358½	175½	326½	193	296	212	266	231	237½	252½	212	278½	185½	299½	163½	326½
Sep			507½	332			440	362			388	405½			333	450
Dec†			661	439			596½	460½			616	488			488½	536

Calls 5,086 Puts 9,419 * Underlying index value. Premiums shown are based on settlement prices. † Long dated expiry months.

LONDON RECENT ISSUES: EQUITIES

Issue price p	Amt paid up	Mkt. cap (£m.)	1999 High	1999 Low	Stock	Close price p	+/-	Net div.	Div. cov.	Grs yld	P/E net
§175	F.P.	132.2	293½	205	Avon Group	271	-1½	-	-	-	-
-	F.P.	30.0	100½	99½	BGI Endowment II	100	+½	-	-	-	-
-	F.P.	19.0	119½	95½	Cairngorm Restruct	114½	+½	-	-	-	-
-	F.P.	0.66	27	17½	Do Wts	20	+1	-	-	-	-
-	F.P.	-	346	329	Canary Wharf	339½	+2	-	-	-	-
-	F.P.	60.1	103½	99	Enhanced Zero Tst	100½	-½	-	-	-	-
*	F.P.	39.5	8	7	Gander Properties	7½		-	-	-	-
§	F.P.	21.8	108	98½	Gartmore High In	108	+1	N7.2	-	6.7	-
-	F.P.	10.7	108	101½	Do Zero Pf	106¼		-	-	-	-
§	F.P.	94.0	100½	92½	Govett Enhanced	94		N7.5	-	8.0	-
-	F.P.	-	105½	100	Do Zero Div Pref	102¾		-	-	-	-
§	F.P.	49.9	104½	94¾	Jupiter Enhanced	104½	+1¼	-	-	-	-
§	F.P.	48.0	110	103¾	Do Zero Div Prf	106¼	+¼	-	-	-	-
-	F.P.	-	300	245	Luminar Warrants	265		-	-	-	-
-	F.P.	80.3	77½	69	M Currie Cap Ret	75½		-	-	-	-
-	F.P.	253.9	90½	79	M Currie Portfolio	79¼	-¼	-	-	-	-
-	F.P.	-	108½	92½	Mercury Asset Allocator	105½	+1	-	-	-	-
-	F.P.	296.5	252½	237½	Morse Hldgs	242½		-	-	-	32.9
-	F.P.	-	102½	100	Murray Global Rtn Pf	102¼		-	-	-	-
-	F.P.	-	190	180¼	Murray Global Rtn Uts	184½	+½	-	-	-	-
-	F.P.	-	190	185	Murray Global Rtn B	185		-	-	-	-
-	F.P.	5.39	110½	107½	†NBA Quantum	110		W-	-	-	11.2
*	F.P.	13.2	157½	55½	†Sports Internet	150	-2½	-	-	-	-

† Alternative Investment Market. § Placing price. * Introduction. For a full explanation of all other symbols please refer to The London Share Service notes.

FTSE GOLD MINES INDEX

	Apr 5	% chg on day	Apr 2	Year ago	Gross div yield %	Total return	52 week High	52 week Low
Gold Mines Index(29)	860.69	-1.20	871.06	1276.29	2.14	868.81	1351.57	701.58
■ Regional indices								
Africa (9)	1004.42	+0.15	1002.95	1301.17	4.14	1023.95	1488.04	765.63
Australasia (9)	1085.16	-0.25	1087.91	1525.17	2.91	1100.26	1600.53	815.93
Americas (11)	774.42	-2.10	791.06	1249.73	0.94	777.56	1317.41	647.69

Figures in brackets show number of companies. Basis US Dollars. Base Value: 1000.00 31/12/92. † Partial.

FTSE Actuaries Share Indices — The UK Series

Produced in conjunction with the Faculty and Institute of Actuaries.

	£ Stg Apr 6	Day's chge%	Euro Index	£ Stg Apr 1	£ Stg Mar 31	Year ago	Actual yield%	Cover	P/E ratio	Xd adj. ytd	Total Return
FTSE 100	6415.28	+1.3	7365.33	6330.02	6295.33	6093.97	2.15	1.73	26.96	51.10	2864.06
FTSE 250	5456.73	+0.1	6264.83	5453.33	5475.20	5547.59	2.89	1.82	19.06	48.07	2395.24
FTSE 250 ex Inv Co	5494.86	-0.1	6308.60	5498.78	5523.87	5586.34	3.02	1.87	17.71	49.58	2423.14
FTSE 350	3037.87	+1.2	3487.75	3003.25	2991.17	2917.62	2.26	1.74	25.39	24.59	2772.50
FTSE 350 ex Inv Co	3046.29	+1.2	3497.42	3011.51	2999.23	2922.91	2.27	1.75	25.16	24.78	1426.15
FTSE 350 Higher Yield	2887.30	+1.1	3314.88	2855.80	2858.50	2847.93	3.07	1.66	19.67	29.14	2267.35
FTSE 350 Lower Yield	3191.67	+1.2	3664.33	3153.79	3125.40	2996.02	1.48	1.92	35.32	19.36	2351.80
FTSE SmallCap	2407.02	+0.1	2763.48	2404.99	2399.86	2635.58	2.93	1.92	17.80	17.82	2142.39
FTSE SmallCap ex Inv Co	2374.28	-0.1	2725.89	2375.87	2371.72	2627.51	3.13	2.02	15.81	18.12	2137.73
FTSE All-Share	2938.28	+1.1	3373.42	2906.22	2894.79	2841.83	2.29	1.75	24.90	23.68	2721.66
FTSE All-Share ex Inv Co	2950.67	+1.1	3387.65	2918.41	2906.78	2849.75	2.30	1.77	24.59	23.94	1406.38
FTSE Fledgling	1310.00	+0.4	1504.00	1304.73	1301.83	1411.34	3.01	1.26	26.27	6.69	1485.34
FTSE Fledgling ex Inv Co	1319.48	+0.2	1514.88	1316.33	1314.83	1428.77	3.44	1.30	22.31	9.54	1507.23
FTSE All-Small	1363.10	+0.2	1564.96	1361.03	1358.11	1487.51	2.95	1.78	19.10	9.87	1548.53
FTSE All-Small ex Inv Co	1370.16	....	1573.07	1370.23	1368.01	1509.41	3.19	1.87	16.80	10.35	1567.99
FTSE AIM	870.06	+0.2	998.90	868.55	866.84	1059.70	1.06	30.00†	0.12	2.35	799.61

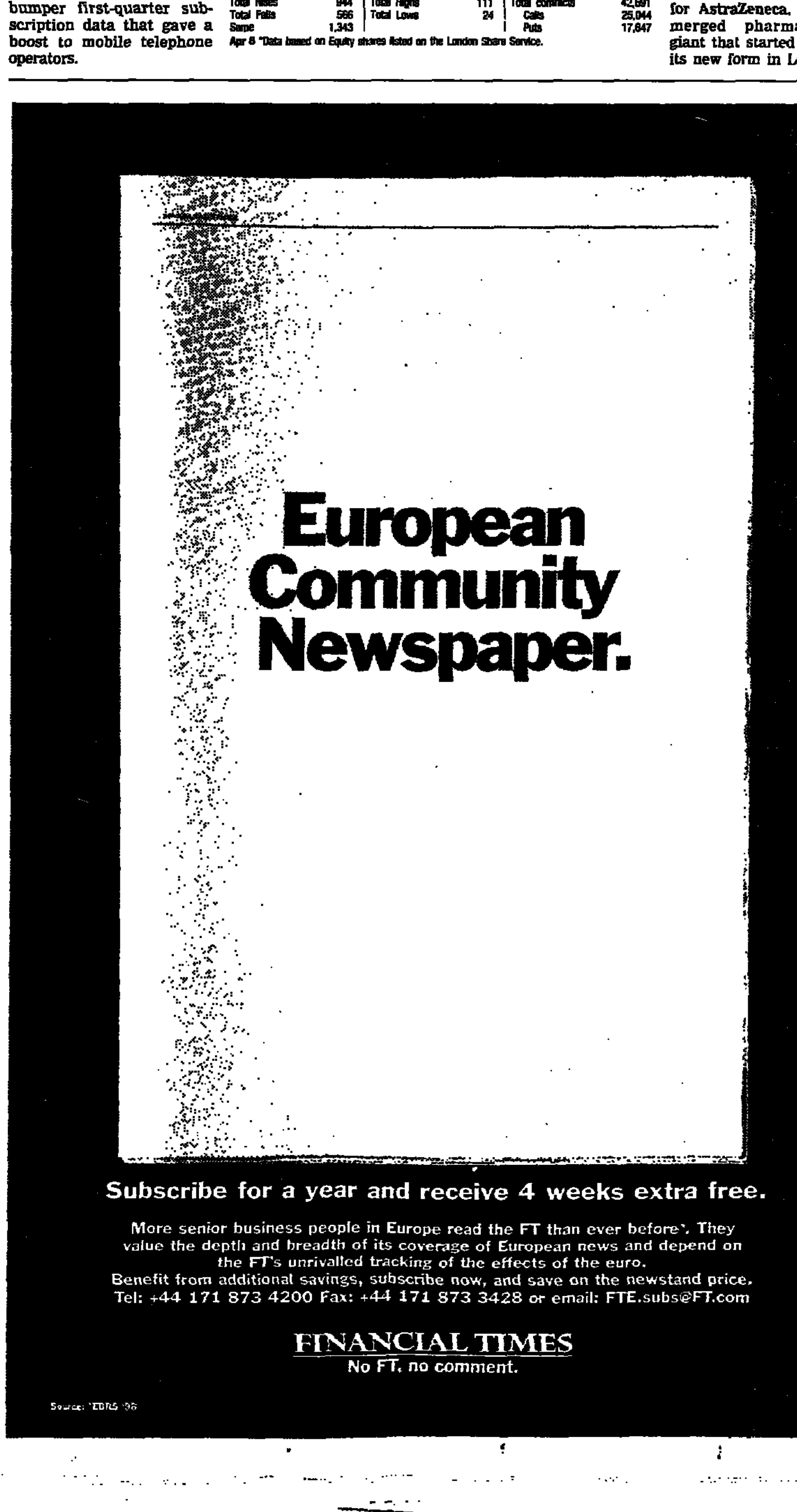
■ FTSE Actuaries Industry Sectors

	£ Stg Apr 6	Day's chge%	Euro Index	£ Stg Apr 1	£ Stg Mar 31	Year ago	Actual yield%	Cover	P/E ratio	Xd adj. ytd	Total Return
RESOURCES(18)	4685.75	+0.3	5379.67	4671.14	4781.45	4738.19	2.67	1.03	36.14	26.99	2201.12
Mining(6)	3268.61	-0.3	3752.66	3277.39	3280.29	3134.64	3.64	1.65	15.70	63.75	1078.38
Oil & Gas(12)	5465.96	+0.4	6275.41	5445.89	5588.41	5315.14	2.58	0.94	41.28	23.20	2635.74
BASIC INDUSTRIES(83)	1943.51	-0.9	2231.33	1961.66	1981.31	2212.08	4.13	1.81	13.41	25.95	1173.96
Chemicals(20)	2022.21	+0.7	2321.68	2007.83	2010.30	2853.25	4.54	1.32	16.76	48.77	1078.22
Construction & Bld Matls(60)	1786.41	-1.7	2050.96	1817.66	1841.27	1843.08	3.47	2.28	12.62	16.35	1005.49

■ TRADING VOLUME

■ Major Stocks yesterday.

	Vol 000's	Closing price	Day's change
3i	687	629	+1½
AMVESCAP	1,129	616	-3
ASDA Group	6,291	148¼	-2
Abbey National	2,444	1261	-24
Alliance & Leicester	1,027	873	-16½
Allied Domecq	6,192	461	
Allied Zurich	4,695	865	+8
Assoc. Brit. Foods	742	412	-10½



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Highs & Lows shown on a 52 week basis

WORLD STOCK MARKETS

EUROPE (EMU) Prices in €

AUSTRIA (Apr 6) 1 € = 13.76030 Sch

BELGIUM/LUX (Apr 6) 1 € = 40.33990 Frs.

FINLAND (Apr 6) 1 € = 5.94573 Mka

FRANCE (Apr 6) 1 € = 6.55957 Frs.

GERMANY (Apr 6) 1 € = 1.95583 Dm.

IRELAND (Apr 6) 1 € = 0.78756 Punt

ITALY (Apr 6) 1 € = 1936.27000 Lire

NETHERLANDS (Apr 6) 1 € = 2.20371 Fl.

PORTUGAL (Apr 6) 1 € = 200.48200 Esc.

SPAIN (Apr 6) 1 € = 166.38600 Pta.

EUROPE (NON-EMU)

CZECH REP (Apr 6 / Koruna)

DENMARK (Apr 6 / Kr)

GREECE (Apr 6 / Drachma)

HUNGARY (Apr 6 / Forint)

POLAND (Apr 6 / Zloty)

SWEDEN (Apr 6 / Kronor)

SWITZERLAND (Apr 6 / Frs.)

TURKEY (Apr 6 / Tk Lira)

PACIFIC

JAPAN (Apr 6 / Yen)

HONG KONG (Apr 6 / H.K.$)

INDONESIA (Apr 6 / Rupiah)

MALAYSIA (Apr 6 / MYR)

NEW ZEALAND (Apr 6 / NZ $)

SINGAPORE (Apr 6 / S$)

AUSTRALIA (Apr 6 / Aust$)

SOUTH KOREA (Apr 6 / Won)

TAIWAN (Apr 6 / TW $)

THAILAND (Apr 5 / Baht)

AMERICAS

CANADA

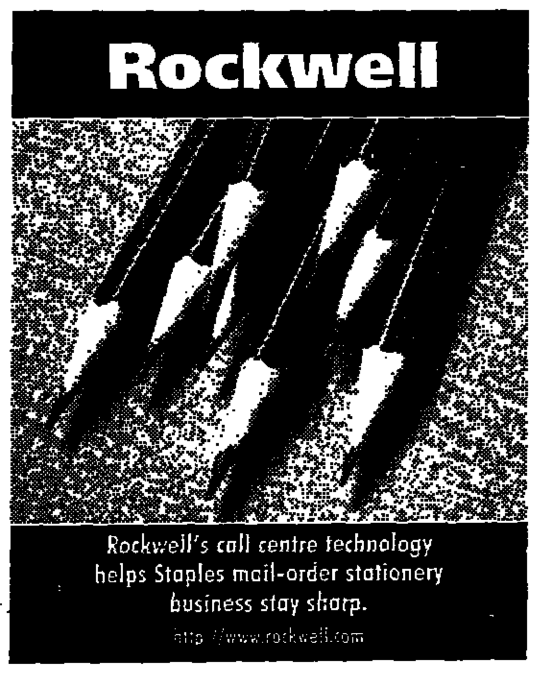
TORONTO (Apr 6 / Can $) 3 pm

MONTREAL (Apr 6 / Can $) 3 pm

MEXICO (Apr 6 / Peso) 12.30pm

AFRICA

SOUTH AFRICA (Apr 6 / Rand)



FT/S&P ACTUARIES WORLD INDICES

The FT/S&P-Actuaries World Indices are owned by FTSE International Limited, Goldman, Sachs & Co. and Standard & Poor's. The Indices are compiled by FTSE International and Standard & Poor's in conjunction with the Faculty of Actuaries and the Institute of Actuaries.

NATIONAL AND REGIONAL MARKETS Figures in parentheses show number of lines of stock	MONDAY APRIL 5 1999 US Dollar Index	Day's Change %	Pound Sterling Index	Yen Index	Euro Index	Local Currency Index	Local % chg on day	Gross Div. Yield	FRIDAY APRIL 2 1999 US Dollar Index	Pound Sterling Index	Yen Index	Euro Index	Local Currency Index	DOLLAR INDEX 52 week High	52 week Low	Year ago (approx)
Australia (75)	216.37	-0.2	200.33	186.75	232.38	227.48	0.0	3.32	218.91	200.51	165.33	231.55	227.48	219.96	163.86	212.07
Austria (21)	181.08	-0.6	167.68	139.56	171.61	171.61	0.0	2.06	182.19	168.42	138.86	171.61	171.61	253.73	165.27	223.43
Belgium (22)	362.55	-0.6	335.67	279.42	336.40	336.40	0.0	2.01	364.78	337.20	278.02	336.40	336.40	446.95	310.68	310.68
Brazil (29)	141.57	2.9	131.08	109.11	152.05	450.17	3.0	5.42	137.59	127.19	104.87	146.87	436.87	269.34	89.32	257.38
Canada (113)	215.34	2.0	199.37	165.96	231.27	233.35	2.0	1.68	211.04	195.08	160.85	225.27	228.87	248.78	159.94	245.08
Denmark (34)	420.39	-0.6	389.22	323.98	451.50	396.23	0.0	1.87	422.90	390.92	322.32	451.42	396.23	537.33	406.62	510.42
Finland (29)	686.44	-0.6	635.56	529.04	798.90	798.90	0.0	1.47	690.66	638.44	526.40	798.90	798.90	692.23	338.49	383.53
France (74)	320.74	-0.6	296.97	247.20	307.82	307.82	0.0	1.98	322.72	298.31	245.96	307.82	307.82	354.45	253.86	299.63
Germany (55)	249.92	-0.6	231.39	192.61	237.01	237.01	0.0	1.67	251.45	232.44	191.65	237.01	237.01	325.61	226.35	275.00
Greece (36)	371.96	-3.2	344.39	286.67	399.50	813.32	-2.5	1.36	384.44	355.37	293.01	410.37	833.76	454.89	211.47	-
Hong Kong, China (66)	323.29	0.1	299.33	249.16	347.22	321.89	0.1	3.59	323.02	298.60	246.20	344.81	321.41	341.93	196.64	336.88
Indonesia (24)	46.10	-1.0	42.68	35.53	49.51	245.48	0.2	1.18	46.57	43.05	35.50	49.71	244.99	64.52	19.04	56.79
Ireland (14)	533.32	-0.6	493.78	411.03	552.00	552.00	0.0	1.86	536.60	496.02	408.98	552.00	552.00	605.85	398.15	518.22
Italy (53)	170.18	-0.6	157.56	131.16	229.53	229.53	0.0	1.50	171.23	158.28	130.50	229.53	229.53	192.64	128.68	170.60
Japan (443)	112.01	-0.9	103.70	86.32	120.30	86.32	0.2	0.85	113.02	104.47	86.14	120.64	86.14	113.68	76.83	91.64
Mexico (29)	1543.71	3.4	1429.28	1189.74	1657.97	16013.98	3.3	1.57	1492.84	1379.97	1137.80	1593.54	15505.86	1733.73	787.15	1635.07
Netherlands (26)	484.68	-0.6	448.76	373.55	454.69	454.69	0.0	2.05	487.88	450.79	371.68	454.69	454.69	562.73	394.92	490.85
New Zealand (18)	63.64	-0.2	58.92	49.05	68.35	83.41	0.0	3.78	63.75	58.93	48.59	68.05	83.41	76.03	45.68	73.88
Norway (37)	238.65	-0.6	220.96	183.93	256.32	252.04	0.0	1.95	240.13	221.97	183.02	258.33	252.04	357.71	181.86	333.14
Philippines (22)	92.33	1.5	85.49	71.16	99.16	177.61	1.1	0.83	90.93	84.06	69.30	97.06	175.60	101.69	42.48	96.64
Portugal (18)	227.48	-0.6	210.62	175.32	291.15	291.15	0.0	1.13	228.88	211.57	174.44	291.15	291.15	299.39	194.13	-
Singapore (40)	228.31	2.9	211.38	175.96	245.21	182.85	3.2	1.48	221.85	205.07	169.08	236.81	177.02	232.72	102.45	215.03
South Africa (34)	206.10	0.2	190.82	158.84	221.35	277.48	0.0	3.47	205.76	190.20	156.82	219.84	277.48	346.20	151.55	315.05
Spain (30)	363.56	-0.6	336.61	280.19	427.42	427.42	0.0	1.64	365.79	338.14	278.80	427.42	427.42	435.19	290.81	387.35
Sweden (43)	530.58	-0.5	491.23	408.91	569.83	650.29	0.0	1.90	533.35	493.03	406.50	569.33	650.29	628.19	379.18	570.11
Switzerland (30)	384.95	-0.7	356.41	296.68	413.44	355.71	0.0	1.19	387.60	358.29	295.42	413.75	355.71	441.65	307.73	400.94
Thailand (26)	24.22	-1.0	22.42	18.67	26.01	35.47	-0.7	2.34	24.45	22.60	18.64	26.10	35.73	28.11	8.15	26.57
United Kingdom (201)	394.50	-0.2	365.35	304.12	423.80	365.35	0.0	2.61	395.23	365.35	301.23	421.89	365.35	401.84	307.96	393.47
USA (607)	544.85	2.1	504.46	419.92	585.18	544.85	2.1	1.22	533.85	493.48	406.88	569.86	533.85	544.85	390.12	456.37
Americas (778)	484.27	2.1	448.37	373.22	520.11	410.75	2.1	1.28	474.43	438.56	361.60	506.43	402.42	484.27	347.59	415.23
Europe (723)	351.77	-0.5	325.69	271.11	377.80	340.42	0.0	2.02	353.46	326.74	269.40	377.30	340.48	386.24	282.63	353.44
Eurobloc (342)	99.16	-0.6	91.81	76.43	101.79	101.79	0.0	1.78	99.77	92.23	76.04	101.79	101.79	113.92	81.53	-
Nordic (143)	514.97	-0.6	476.80	396.89	553.09	546.46	0.0	1.77	517.89	478.74	394.72	552.83	546.46	555.97	360.04	498.11
Pacific Basin (714)	119.37	-0.7	110.52	92.00	128.20	94.43	0.2	1.32	120.20	111.11	91.61	128.31	94.21	120.83	62.88	103.08
Euro-Pacific (1437)	215.71	-0.6	199.72	166.25	231.68	186.78	0.1	1.80	216.90	200.50	165.31	231.53	186.67	221.79	166.00	207.39
North America (720)	522.51	2.1	483.78	402.70	561.18	523.32	2.1	1.24	511.96	473.25	390.20	546.49	512.77	522.51	374.82	444.77
Europe Ex. UK (522)	319.74	-0.6	296.04	246.43	343.41	318.28	0.0	1.70	321.83	297.49	245.29	343.54	318.37	366.32	260.98	322.80
Europe Ex. Eurobloc (381)	98.58	-0.4	91.27	75.97	105.88	101.96	0.0	2.25	98.92	91.44	75.40	105.60	102.00	103.93	77.40	-
Europe Ex. UK Ex. Eurobloc (180)	94.40	-0.8	87.40	72.75	101.39	96.80	-0.1	1.44	95.13	87.94	72.51	101.55	96.72	109.21	75.16	-
Pacific Ex. Japan (271)	193.76	0.1	179.40	149.33	208.11	198.39	0.3	3.20	193.52	178.89	147.50	206.57	197.75	206.83	128.26	202.30
World Ex. Eurobloc (1907)	112.08	1.2	103.77	86.38	120.38	112.00	1.4	1.45	110.76	102.38	84.42	118.23	110.45	112.08	83.09	-
World Ex. US (1642)	215.89	-0.4	199.89	166.39	231.87	192.24	0.2	1.83	216.72	200.34	165.18	231.34	191.89	221.91	165.95	211.62
World Ex. UK (2048)	314.88	1.1	291.53	242.68	338.18	287.06	1.3	1.37	311.60	288.04	237.49	332.62	283.30	314.88	236.11	281.56
World Ex. Japan (1806)	426.41	1.1	394.80	328.64	457.97	423.73	1.3	1.58	421.56	389.68	321.30	449.99	418.26	427.99	320.58	390.00
The World Index (2249)	321.77	0.9	297.92	247.99	345.59	294.30	1.2	1.50	318.81	294.71	242.99	340.92	290.85	321.77	242.36	291.01

PLEASE NOTE (EFFECTIVE 6/4/99): Removal of ACT from UK dividends. CONSTITUENT CHANGES WITH EFFECT 6/4/99: Deletions: Astra 'A' and 'B' (Sweden). Name changes: Republic Industries to AutoNation (USA) and Zeneca Group to AstraZeneca (UK). Markets closed 5/4/99: Australia, New Zealand, Hong Kong, Europe (except Greece). Latest prices were unavailable for this edition.

Emerging markets: IFC investable indices

Dollar terms

Apr 05 Market		Day's chg %	% Chg since 31/12/98
Latin America			
Argentina	828.82	+2.8	+3.9
Brazil	290.72	+2.1	+5.7
Chile	528.45	+0.9	+17.7
Colombia[1]	372.07	-0.2	-15.3
Mexico	640.27	+3.2	+33.0
Peru[2]	141.45	-1.1	+5.3
Venezuela[3]	375.96	+3.6	-17.1
East Asia			
China[4]	24.53		-6.3
India[7]	74.25	-4.5	+15.7
Indonesia[8]	22.93	-1.0	-5.3
Korea[6]	59.92	-0.1	+13.0
Malaysia	61.91	-1.7	-7.5
Pakistan[9]	104.78	-1.0	+10.8
Philippines	127.49	+1.7	+3.6
Sri Lanka[10]	84.34	+0.2	-21.9
Taiwan, China[6]	133.09	-0.0	+14.9
Thailand	60.28	-1.6	-4.6
Europe			
Czech Rep	44.01	-0.6	-13.3
Greece	670.68	-3.1	+8.3
Hungary[5]	240.53	-0.3	-14.3
Poland[12]	515.91	-0.4	-1.5
Russia	38.89	-0.3	+65.0
Slovakia	34.29	-0.6	-21.4
Turkey[14]	225.62	+2.8	+54.2
Mideast/Africa			
Egypt	71.27	-0.2	+10.6
Israel	123.21	+0.9	+20.5
Jordan	231.84	-0.4	+7.1
Morocco	155.04	-1.1	-7.5
S Africa[13]	143.62	+0.2	+14.7
Zimbabwe[15]	132.89		+26.2
Regions			
Composite	209.13	+0.5	+12.0
Latin America	481.71	+2.3	+14.8
Asia	117.52	-0.4	+9.8
EMEA	126.65	-0.3	+10.9
Europe	162.02	-0.8	+8.2
Eastn Europe	60.51	-0.4	+4.1
ME & Africa	80.93	+0.2	+13.6
Comp + Malay	209.71	+0.4	+10.7
Asia + Malay	114.88	-0.8	+6.3

Base date: Dec 1988=100 except those noted which are: (1)Feb 1 1991; (2)Dec 31 1992; (3)Jan 5 1990; (4)Dec 31 1992; (5)Jan 3 1992; (6)Jan 4 1991; (7)Nov 5 1992; (8)Sep 28 1990; (9)Mar 1 1991; (10) Dec 31 1992; (11)Dec 31 1993; (12)Dec 31 1992; (13)Dec 31 1992; (14)Dec 31 1992; (15)Aug 2 1993; (16) July 3 1993.

Latest indices were unavailable for this edition.

3 pm April 6

NEW YORK STOCK EXCHANGE PRICES

- A -

1999 High	Low	Stock	Div	Yld %	P/E	Vol 100s	High	Low	Close Quote	Ch'ge Prev. Close
24	14 1/4	AAR	0.34	1.9	13	1429	18 1/8	17 7/8	18	+1/8
73 1/8	53	AMR			9	17223	66 1/2	63 7/8	65 1/4	-1 1/8
19 1/2	15 3/4	ASA	0.60	3.6	18	298	16 5/8	16 1/8	16 3/8	+1/8
51 3/8	42 1/4	AbbtL	0.60	1.2	34	8531	48 1/4	47 1/2	48 1/4	
9	7 7/8	Abitibi	0.40	4.5	4	168	9	8 1/2	8 1/2	
35	25 3/4	ABM Ind	0.56	1.9	18	162	30 1/8	29	29	
20	13	Acptmcin			5	314	13 3/4	13 1/4	13 1/8	
34	25	ACE Ltd x	0.36	1.2	8	4219	31	30 1/2	30 1/2	
9 1/2	8	ACM Grt In x	0.90	10.6	9	548	8 1/2	8 3/8	8 1/2	+1/8
8	7	ACM GvOpp x	0.63	8.5		153	7 1/2	7 3/8	7	
9 1/4	8 1/8	ACM Man x	1.02	11.8		126	8	8	8	
5 3/8	4	Acme Elect			7	50	4	4 1/4	4 1/4	-1/8

- X - Y - Z -

1999 High	Low	Stock	Div	Yld %	P/E	Vol 100s	High	Low	Close Quote	Ch'ge Prev. Close
63	51	Xerox	0.80	1.4	22	14475	55 3/4	54	55	
77 1/4	56	XL Cap	1.76	3.0	9	3160	59	58 1/2	58 1/2	
41 1/2	27 1/2	Xtra Corp			9	62	28 1/4	27 1/2	27 1/2	
29 1/4	23	York Intl	1.32	5.6	23	128	23	24 1/2	23	
41 1/2	32	YPF	0.60	1.7	10	1152	35 1/2	35	35 1/2	
15 1/2	7 1/2	Zapata			3	420	8	7 1/2	8	
25	20 1/2	Zenith Nat	1.00	4.2	18	69	23 1/2	23	23 1/2	
6	5	Zenix Inc	0.67	11.4		117	5 1/2	5	5	
11	10	Zweig Fd	1.20	11.2		491	10 1/4	10	10 1/2	
9	8	Zweig Tot	0.94	10.2		417	9	9	9	

Price data supplied by Financial Times Information

Yearly highs and lows for NYSE reflect the period from Jan 1 1999. Unless otherwise noted rates of dividend are annual disbursements based on the latest declaration. Volume figures are unofficial.

d-new yearly low. P/E price-earnings ratio. vol- volume. u-new yearly high. x-ex-dividend or ex rights. xw-ex-warrants. z-sales in full. ♣ Ordinary Suspended.

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GLOBAL EQUITY MARKETS

US INDICES

Dow Jones	Apr 5	Apr 2	Apr 1	1999 High	1999 Low	Since compilation High	Since compilation Low
Industrials	10007.33	(c)	9832.51	10007.33 (5/4)	9120.67 (22/1)	10007.30 (5/4/99)	41.22 (8/7/32)
Home Bonds	104.02	(c)	103.95	106.88 (13/1)	103.95 (1/4)	107.17 (9/12/98)	54.99 (1/10/81)
Transport	3353.40	(c)	3308.16	3433.87 (18/3)	3063.80 (22/1)	3686.02 (16/4/98)	13.23 (8/7/32)
Utilities	297.23	(c)	295.01	311.91 (4/1)	288.44 (12/2)	320.51 (8/10/98)	16.53 (8/7/32)

DJ Ind. Day's high 10086.87 (9927.69) Low 9828.40 (9708.18) (Theoretical♣)
Day's high 10025.18(c) Low 9836.12 (c) (Actual♣)

Standard and Poors	Apr 5	Apr 2	Apr 1	1999 High	1999 Low	Since compilation High	Since compilation Low
Composite‡	1321.12	(c)	1293.72	1321.12 (5/4)	1212.19 (14/1)	1321.12 (5/4/99)	4.40 (1/6/32)
Industrials♥	1593.19	(c)	1560.22	1593.19 (5/4)	1461.72 (14/1)	1593.19 (5/4/99)	3.52 (30/6/32)
Financial♥	142.52	(c)	139.22	145.47 (15/3)	123.72 (9/2)	147.59 (14/7/98)	7.13 (4/9/74)
Others							
NYSE Comp.	614.63	(c)	604.99	617.61 (18/3)	576.82 (9/2)	617.61 (18/3/99)	4.54 (25/4/42)
Amex Comp	721.24	(c)	711.30	721.65 (11/3)	683.61 (4/1)	753.87 (22/4/98)	524.20 (16/7/98)
NASDAQ Cmp	2560.06	(c)	2493.37	2560.06 (5/4)	2208.05 (4/1)	2560.06 (5/4/99)	54.87 (3/10/74)
Russell 2000	402.29	(c)	398.74	433.13 (11/1)	383.37 (23/3)	491.41 (21/4/98)	123.38 (7/12/83)

■ RATIOS

	Mar 26	Mar 19	Mar 12	Year ago
Dow Jones Ind. Div. Yield	1.61	1.60	1.60	1.30
	Mar 31	Mar 24	Mar 17	Year ago
S & P Ind. Div. yield	1.11	1.13	1.11	1.31
S & P Ind. P/E ratio	40.39	39.72	40.63	30.64

US DATA

■ MARKET ACTIVITY

● Volume (million)	Apr 5	Apr 1	Mar 31
NYSE	695.830	705.680	1,095.2
Amex	27.571	28.364	26.818
NASDAQ	963.255	855.897	926.882

NYSE	Apr 5	Apr 1	Mar 31
Issues Traded	3,559	3,636	3,551
Rises	1,692	1,518	1,395
Falls	1,307	1,446	1,643
Unchanged	560	572	512
New Highs	72	33	63
New Lows	76	100	181

■ NYSE TRADING ACTIVITY — Volume : 695,830,000

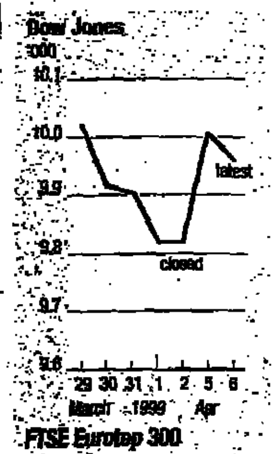
■ ACTIVE STOCKS Monday	Stocks traded	Close price	Day's change
LucentTch	20,243,500	58¾	+3¾
AmOnLne	16,104,400	166⅝	+16⅞
Citigrp	7,915,000	66½	+1⅞
PhMorr	7,802,800	39	+¼
AT&T	7,594,300	77⅞	−1⅞
Compaq	7,118,300	31⅛	+⅛
Tycoln	6,118,800	73⅝	+1⅞
Merck	5,194,200	78⅛	−1⅝
Mdtrnc	4,840,200	67⅝	−2⅛
Disney	4,247,800	31⅝	

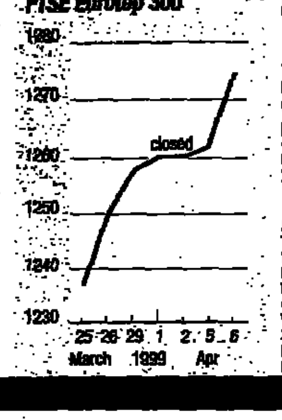
■ BIGGEST MOVERS Monday	Close price	Day's change	Day's chge %
Ups			
Banctec	15⅛	+2⅝	+19.2
ServCp	14⅝	+1½	+11.7
AmOnLne	166⅞	+16⅞	+11.3
Anixter	13⅝	+1⅝	+11.2
Downs			
Brush Well	13⅛	−1⅛	−10.4
CKE	17⅝	−1⅝	−9.5
Ryland Grp	22⅝	−2⅛	−8.4
Revlon A	19⅝	−1⅞	−8.7

■ NASDAQ TRADING ACTIVITY — Volume :963,255,000

■ ACTIVE STOCKS Monday	Stocks traded	Close price	Day's change
DellCmp	32,452,300	44⅛	+2⅝
Oracle	20,600,000	25⅛	−⅛
Yahoo	20,505,800	219⅝	+38⅝
Micsft	19,923,100	94⅞	+2¼
Intel	14,196,000	127⅝	+6⅝
MCIWcm	11,088,300	92⅝	+3⅝
CiscoSys	10,208,500	114⅛	+4⅛
AppMat	9,985,500	65⅝	+1⅝
Skytel Com	9,874,800	19	+3⅝
E trade	9,471,100	72⅝	+11⅝

■ BIGGEST MOVERS Monday	Close price	Day's change	Day's chge %
Ups			
AmeriTrade	91⅝	+29⅛	+46.5
Hlthean	58¾	+12	+26.0
Skytel Com	19	+3⅝	+25.8
MindSpring	111¼	+22⅞	+25.8
Downs			
AdvLrnSys	24⅝	−5⅛	−18.1
WndRvSy	14	−2⅛	−14.8
Synopsys	46	−7⅝	−13.4
SiliconVGp	13⅞	−1⅞	−12.5





JAPAN

	Apr 6	Apr 5	Apr 2	1999 High	1999 Low	Since compilation High	Since compilation Low
Nikkei 225	16479.71	16334.78	16290.19	16479.71	13232.74	38915.8	85.25

Day's high: 16484.27. Day's low: 16084.71

■ TOKYO TRADING ACTIVITY — Volume : 569,100,000

■ ACTIVE STOCKS Tuesday	Stocks traded	Close price	Day's change
Fujitsu	11,890,000	2120	+5
AtsNyl	10,883,000	133	+27
NKKoS	8,811,000	825	+15
FujiBk	7,920,000	786	+18
Sakura	7,458,000	378	+11
NpSti	7,454,000	260	+1
Hitachi	7,356,000	849	+31
KobeStl	6,526,000	87	+2
JGC	6,497,000	297	−3
MitTrB	5,891,000	177	

■ BIGGEST MOVERS Tuesday	Close price	Day's change	Day's chge %
Ups			
AtsNyl	133	+27	+25.5
Niigata	115	+14	+13.9
YktoHsh	1140	+130	+12.9
Tokico	181	+20	+12.4
Downs			
FujiEl	393	−29	−6.9
GnShus	330	−18	−5.2
MaldAll	720	−35	−4.6
NpShts	186	−9	−4.6

GERMANY

	Apr 6	Apr 5	Apr 2	1999 High	1999 Low	Since compilation High	Since compilation Low
DAX	4965.29	closed	closed	5443.82	4678.72	6171.43	981.18

Day's high: 4992.10. Day's low: 4936.19.

■ FRANKFURT TRADING ACTIVITY — Volume . (a)

■ ACTIVE STOCKS Tuesday	Stocks traded	Close price	Day's change
Dt Bk	324,231	48.65	+0.7
ThyKrp	296,258	19.2	+0.72
Bayer	291,409	35.55	+0.05
DaimCh	269,637	83.5	+0.78
BASF	262,500	35.25	+0.25
Cmrzbk	237,504	28.8	+0.4
Veba	223,789	50.3	+1.8
Mannsm	218,838	129.35	+6.05
BHF Bk	185,792	38.1	+0.5
Dt Tel	175,979	38.95	+0.45

■ BIGGEST MOVERS Tuesday	Close price	Day's change	Day's chge %
Ups			
Colbnz	98	+6	+6.5
Drgwk	12.7	+0.7	+5.8
GEA	22.2	+1.2	+5.7
Sixt	60.5	+3	+5.2
Downs			
Messa	78.5	−4.4	−5.3
Dt Bab	42	−2	−4.5
AGIndV	17.05	−0.75	−4.2
ErgoVr	116	−5	−4.1

FRANCE

	Apr 6	Apr 5	Apr 2	1999 High	1999 Low	Since compilation High	Since compilation Low
CAC 40	4304.48	closed	closed	4304.48	3958.72	4388.48	984.61

Day's high: 4328.92. Day's low 4251.14.

■ PARIS TRADING ACTIVITY — Volume : (a)

■ ACTIVE STOCKS Tuesday	Stocks traded	Close price	Day's change
FrTele	2,215,905	79.9	+2.6
Usinor	1,359,214	12.67	+0.07
RhodPA	1,166,818	41.8	−0.4
Alctel	881,054	111.9	+2.9
Axa	862,454	127	+1.7
ElfAqu	860,382	126	+4.5
BNP	853,497	79.2	−0.8
Renault	706,754	32.66	−0.64
Lfarge	685,289	87.1	+2.6
TotalB	684,420	115	+3.8

■ BIGGEST MOVERS Tuesday	Close price	Day's change	Day's chge %
Ups			
Equant	75.9	+4.4	+6.2
STMicro	97.5	+5.6	+6.1
Peug't	142.8	+5.9	+4.3
Carrsf+	283.8	+10.8	+4.0
Downs			
SommerA	25.02	−1.28	−4.9
Ciment	47.05	−2.4	−4.9
SchndrA	116.1	−5.8	−4.8
PrnRic	56	−2.5	−4.3

UK

	Apr 6	Apr 5	Apr 2	1999 High	1999 Low	Since compilation High	Since compilation Low
FTSE 100	6415.3	closed	closed	6415.30	5770.20	6416.3	986.9

Day's high: 6449.9. Day's low: 6329.8.

■ LONDON TRADING ACTIVITY — Volume : 973,000,000

■ ACTIVE STOCKS Tuesday	Stocks traded	Close price	Day's change
BP Amoco	28,540,050	1011½	+2
Signet	25,667,360	49¾	
AstraZeneca	22,328,120	2946	−91
Shell T&T	21,904,360	420	+3
BTR Siebe	21,674,750	282¾	+5
Marks&Spcr	20,277,430	436¾	+30¼
Capital Corp	19,107,360	83½	
Vodafone	17,402,530	1206	+24
TeleWest	14,804,960	298¾	+19
BG	13,709,710	353	−15½

■ BIGGEST MOVERS Tuesday	Close price	Day's change	Day's chge %
Ups			
MetalTech Intl	¾	+¼	+50
Foster (J)	10½	+3½	+50
Xaar	95	+21½	+29.3
Xenova	108½	+22	+25.4
Downs			
Sorrey	⅝	−⅛	−16.7
Coffee Rep	11	−1½	−12
Jarvis	478	−64½	−11.9
Fortune	3¾	−½	−11.8

INDEX FUTURES

■ S&P 500	Open	Latest	Change	High	Low	Est. vol.	Open Int.
Jun	1332.90	1322.20	+19.50	1333.10	1329.50	71,937	370,044
Sep	–	1346.10	–	–	–	49	4,709
■ Nikkei 225	Open	Sett price	Change	High	Low	Est. vol.	Open int.
Jun	16380.0	16450.0	+70.0	16450.0	16080.0	35,771	211,843
Sep	16480.0	16300.0	−180.0	16480.0	16300.0	53	4,247

Open interest figures for previous day

■ CAC-40 (200 x Index)	Open	Sett Price	Change	High	Low	Est. vol.	Open Int.
Mar	4275.5	4311.0	+53.0	4335.5	4252.0	53,056	109,602
Apr	4260.0	4299.0	+52.0	4280.0	4260.0	36	492
■ DAX							
Jun	4969.0	5047.0	+123.5	5055.0	4944.0	41,204	296,082
Sep	4996.0	5061.0	+81.5	5038.0	4996.0	51	1,095

■ OMX	Open	Sett Price	Change	High	Low	Est. vol.	Open Int.
Apr	748.00	767.00	+23.00	768.00	748.00	20,248	110,171
May	744.50	762.50	+20.00	762.50	744.50	3,045	1,010
■ EUREX							
Jun	7135.0	7121.0	+48.0	7160.0	7069.0	17,148	100,957
Sep	7160.0	7138.0	+63.0	7160.0	7109.0	95	3,828

WORLD MARKETS AT A GLANCE

Country	Index	Apr 6	Apr 5	Apr 2	1999 High	1999 Low	Yield	P/E
Argentina	General	17999.21	17763.56	(c)	18103.16 6/1	14484.90 14/1	3.96	13.8
Australia	All Ordinaries	3032.9	(c)	(c)	3032.90 8/4	2804.80 14/1	2.89	23.1
	All Mining	568.0	(c)	(c)	613.58 12/1	559.78 1/4		
News Corp soared 11.8 per cent after news of deal to take full ownership of Fox/Liberty Networks.								
Austria	ATX Index	1207.12	(c)	(c)	1213.35 16/3	1011.25 22/1	1.96	12.9
OMV rose 6 per cent as broad market gained ground.								
Belgium	BEL20	3299.06	(c)	(c)	3681.92 6/1	3185.75 24/3	1.59	20.8
Ended higher. Electronics leader Barco rose 4.1 per cent.								
Brazil	Bovespa	11292.0	11022.0†	(c)	11028.80 30/3	5057.00 14/1	na	na
‡Pushed higher in early trading.								
Canada	TSE 100♦	413.44	411.12	(c)	421.37 8/1	376.30 3/3	1.67	18.9
	Metals Minls♦	3171.11	3223.52	(c)	3519.97 11/1	2853.44 18/2		
	TSE300Comp♦	6767.80	6739.70	(c)	6968.90 8/1	6180.30 3/3		
	Portfolio§§	3655.27	3626.75	(c)	3626.75 5/4	3281.55 3/3		
‡Gained ground in early trading.								
Chile	IGPA Gen♥	4187.69	4184.78†	(c)	4182.71 5/4	3297.63 14/1	3	13.7
China	Shanghai B	27.88	27.77	27.63	28.89 8/1	21.38 9/3	1.52	27.8
	Shenzhen B	51.78	51.78	51.78	93.34 8/1	41.58 10/3		
Shanghai B shares drifted lower on thin volumes. Zhejiang Power was most active issue and fell 3.3 per cent.								
Colombia	IBB	(u)	908.79	(c)	1089.52 4/1	850.78 4/2	na	na
Czech Republic	PX 50	400.4	(c)	398.5	413.80 6/1	333.40 1/3	na	na
Closed little changed. Telecoms leader SPT stayed firm.								
Denmark	CopenhagenSE	606.45	(c)	(c)	650.71 5/1	585.51 16/3	1.74	17.9
Tele Danmark rose 3.4 per cent on broad market rally.								
Egypt	Cairo SE Gen	454.38	454.5	(u)	454.50 5/4	398.42 11/1	na	na
Ended little changed in thin, directionless trading.								
Finland	Hex General	6842.26	(c)	(c)	6842.26 6/4	5679.66 10/2	1.51	26.2
Hit fourth consecutive record high with Nokia up 2.2 per cent.								
France	SBF 250	2711.52	(c)	(c)	2711.52 6/4	2507.84 13/1	2.15	21.6
	CAC 40	4304.48	(c)	(c)	4304.48 6/4	3958.72 13/1		
Ended higher as Kosovo news counterbalanced early weakness on Wall Street.								
Germany	FAZ Aktien	1593.35	(c)	(c)	1709.20 8/1	1489.89 4/3	1.41	19.3
	DAX‡	4965.29	(c)	(c)	5443.82 6/1	4678.72 4/3		
Pushed ahead strongly in late trading. Mannesmann rose 4.8 per cent.								
Greece	Athens General	3380.20	3218.06	3303.49	3774.29 19/3	2798.21 13/1	1.73	25.7
	FTSE/ASE 20	2068.51	2014.66	2053.86	2354.80 22/3	1758.87 13/1		
Banks and construction sectors, both up more than 3 per cent, led market higher.								
Hong Kong	Hang Seng	11072.98	(c)	(c)	11107.24 22/3	9076.33 10/2	3.08	16.9
	HSCC Red Chip	811.45	(c)	(c)	921.75 8/1	685.52 8/2		
Hungary	Bux	5708.94	5618.63	(u)	6848.08 8/1	5255.03 4/3	na	na
India	BSE Sens.	3569.47	3519.39	(c)	3784.11 9/3	3122.84 4/1	na	na
	S & P CNX 500	716.75	714.77	(c)	759.25 31/3	620.19 4/1		
Reversed early losses to close modestly higher.								
Indonesia	Jakarta Comp.	395.51	395.33	(c)	457.94 7/1	372.31 15/3	2.5	17.4
Bank Internasional Indonesia headed actives list in an otherwise dull market as it slid to its rights issue price.								
Ireland	ISEQ Overall	5362.74	(c)	(c)	5430.42 22/3	5064.95 14/1	2	19.6
Israel	Tel Aviv 100	354.97	(c)	(c)	354.97 6/4	280.44 10/2	na	na
Hit fresh highs in thin, holiday-constrained trading.								
Italy	BCI Comit 30	370.93	(c)	(c)	378.07 5/1	323.36 9/2	1.99	25.4
	Banca Com Ital	1584.74	(c)	(c)	1598.78 7/1	1398.58 10/2		
	Mibtel General	25111.0	(c)	(c)	25292.09 5/1	22398.00 9/2		
Pushed higher with banks leading the way up.								
Japan	Nikkei 225	16479.71	16334.78	16290.19	16479.71 6/4	13232.74 5/1	0.61	62.1
	Nikkei 300	266.12	262.67	262.33	266.12 6/4	208.28 5/1		
	Topix	1322.61	1307.17	1304.17	1322.61 6/4	1048.33 5/1		
	2nd Section	1672.52	1665.53	1646.25	1672.52 6/4	1159.18 14/1		
Nikkei at eight-month highs after Monday's tankan survey showed a modest rise, its first gain in almost two years.								
Jordan	Amman SE	(u)	(c)	(c)	185.28 8/3	171.86 5/1	na	na
Malaysia	KLSE Comp.	558.93	535.84	540.07	618.54 22/1	484.57 24/3	2.67	15.3
Foreign buying helped to drive shares sharply higher in wake of Monday's interest rate cut.								
Mexico	IPC	5124.56	5161.94	(c)	5161.94 5/4	3300.42 13/1	1.1	16.7
‡Moved ahead in early trading.								
Morocco	CASA	788.35	(c)	(c)	846.82 1/2	781.76 12/3	na	na
Netherlands	CBS TtlRtnGen	1331.5	(c)	(c)	1401.10 8/1	1241.18 13/1	2.25	26.8
	CBS All Shr	740.2	(c)	(c)	778.89 8/1	690.70 13/1		
Followed the rest of Europe higher. Aegon rose 6 per cent.								
New Zealand	Cap. 40	2135.18	(c)	(c)	2261.39 22/2	2103.80 10/2	5.18	21.6
Easier in thin trade amid foreign supply and subdued domestic demand ahead of imminent Contact Energy flotation.								
Nigeria	SE All-Share	5443.05	(c)	(c)	5857.40 4/1	5367.56 2/3	na	na
Norway	Oslo SE Ind	1856.77	(c)	(c)	1856.77 6/4	1652.92 13/1	2.11	12.2
Closed little changed in narrow trading.								
Pakistan	KSE-100	1036.02	1041.62	1052.03	1679.58 10/3	882.44 8/2	na	na
Slipped after court hearing on row between state utility Wapda and Hubco was adjourned until May 4 to determine a ruling.								
Peru	Lima Gen	1473.83	1467.71	(c)	1470.28 31/3	1246.29 14/1	na	na
Philippines	Manila Comp	2043.36	2041.17	(c)	2167.48 13/1	1894.59 11/2	1.31	14.8
Steadily firmer after news of sharp fall in inflation in March. Rises beat falls by 3 to 2.								
Poland	Wig	14579.3	(c)	(c)	14709.70 11/1	12581.10 15/1	1.93	12.6
Ended higher with gainers beating losers 34 to 21.								
Portugal	BVL 30	4717.97	(c)	(c)	5258.85 6/1	4370.85 18/3	2.17	25.7
	PSI 20	10897.03	(c)	(c)	12120.85 6/1	10083.08 18/3		
Russia	RTS	75.51	79.24	78.74	80.02 17/3	54.48 28/1	na	na
Finished lower with IMF doubts hitting sentiment.								
Singapore	SES All-S'pore	428.95	424.16	(c)	428.95 6/4	351.45 10/2	1.56	23.3
	Straits Times	1606.15	1581.60	(c)	1606.15 6/4	1288.56 10/2		
Straits Times drove to 17-month high. Banks led gains while properties, which have had strong recent run, lagged.								
Slovakia	Sax	83.11	(c)	(c)	95.89 14/1	80.35 26/3	na	na
South Africa	JSE All Share	6406.8	(c)	(c)	6574.90 19/3	5404.80 4/1		
	JSE Gold	(u)	(c)	(c)	1310.80 15/3	847.50 26/2		
	JSE Indl.	7486.8	(c)	(c)	7711.00 19/3	6261.50 4/1		
Ended lower in spite of steady financials. Golds fell 1.7 per cent.								
South Korea	KoreaCmpEx**	666.73	(c)	646.78	668.73 6/4	498.42 24/2	0.93	23.2
Index at 19-month highs with demand from domestic institutions pushing shares sharply higher in intense activity.								
Spain	Madrid SE	887.83	(c)	(c)	931.55 5/1	827.77 13/1	1.97	20.9
Led the performance charts among leading bourses. Foods retailer Superdiplo jumped 5 per cent.								
Sri Lanka	CSE All Share	536.10	(c)	(c)	587.79 13/1	529.91 18/3	na	na
Drifted lower in thin trade as investors awaited outcome of polls for five of the country's eight provincial councils.								
Sweden	AffarsvrldsGen	3611.3	(c)	(c)	3611.30 6/4	3269.40 13/1	1.78	21.3
Hit a record high with Ericsson gaining 4 per cent.								
Switzerland	SMI Index	7170.0	(c)	(c)	7669.80 6/1	6891.20 10/2	1.37	23.6
	SPI General	4560.65	(c)	(c)	4781.92 6/1	4362.03 10/2		
Ended higher, but significantly short of the best of the session.								
Taiwan	WeightedPr.**	7163.99	(c)	7232.51	7232.51 2/4	5474.79 5/2	1.38	22.5
Pulled back from intraday high of 7,245.68 as investors turned cautious in wake of recent gains.								
Thailand	Bangkok SET	350.73	350.73	357.10	402.56 6/1	313.85 11/2	0.9	7.5
Turkey	IMKB Nat. 100	4896.66	4706.09	(c)	4896.66 6/4	2408.87 25/1	2.69	19.6
Rose to a record high on hopes for a positive result from this month's elections.								
Venezuela	IBC	4448.16	4291.83	(c)	4720.77 4/1	3705.91 5/3	na	na
Zimbabwe	ZSE Industrial	(u)	(c)	(c)	9025.76 30/3	6465.64 5/1	na	na
WORLD	FT/S&P World(S)	(u)	321.77	318.82	321.77 5/4	299.56 3/3	na	na
	MS Capital Int$	(u)	1209.22	(c)	1209.70 19/3	1121.90 10/2	na	na
CROSS-BORDER	DJ Stoxx 50	3630.34	(c)	(c)	3630.34 6/4	3260.29 10/2		
	DJ Euro Stx 50	3644.76	(c)	(c)	3885.36 6/1	3325.56 10/2		
	FTSE E300	(u)	(c)	(c)	1261.32 6/1	1164.86 10/2		
	FTSE E100	(u)	(c)	(c)	2830.87 1/4	2663.70 10/2	na	na
	HSBC Drgn	(u)	(u)	245.46	238.71 13/1	204.59 9/2	na	na
	ING Bring Emrg	(u)	126.60	(c)	126.60 5/4	108.82 15/1	na	na

** Sat Apr 3: Taiwan Weighted Price 7162.20 §§ Montreal. ♦ Toronto. (c) Closed. (u) Unavailable. ‡ XETRA-DAX after-hours index: Apr 6 - 5022.27 −128.46. † Correction. * Calculated at 15.00 GMT. ⊕ Excluding bonds. ‡ Industrial, plus Utilities, Financial and Transportation. ♣ The DJ Ind. Index theoretical day's highs and lows are the averages of the highest and lowest prices reached during the day by each stock, whereas the actual day's highs and lows represent the highest and lowest values that the index has reached during the day. (The figures in brackets are previous day's). ♥ Subject to official recalculation. ⚘ Yields and P/E ratios are based on Datastream Total Market Indices. ⚘ Midsession. T Last Thursdays report.

THE NASDAQ-AMEX MARKET GROUP

2:45 pm April 6

Stock	Div.	P/E	Vol 100s	High	Low	Last	Chng
[illegible]							

AMEX

2:45 pm April 6

Stock	Div.	P/E	Vol 100s	High	Low	Last	Chng
[illegible]							

EASDAQ

[illegible]

STOCK MARKETS

Yugoslavia ceasefire call cheers investors

WORLD OVERVIEW

European stock markets closed substantially higher yesterday after investors cheered Yugoslavia's decision to call a ceasefire in Kosovo, *writes Bertrand Benoit.*

Europe had emerged from the Easter break with some catching up to do following Monday's strong run on Wall Street and a good overnight performance by Asian bourses.

The relatively upbeat mood persisted throughout the day despite an unsteady start in New York that took the Dow Jones Industrial Average back below 10,000. But news that Yugoslavia was suing for peace, breaking minutes before the close, sent most markets shooting up.

Frankfurt showed the way, concluding a hesitant day with a 2.5 per cent gain. Paris added a more modest 1.8 per cent while Madrid rose a hefty 2.4 per cent. The euro reacted equally well to the news, rising almost one cent against the dollar in late afternoon trading.

Investors also kept on eye on the European Central Bank which meets tomorrow to decide interest rate policy.

Although ECB members have adopted a dovish tone in recent weeks, healthy levels of private sector borrowing, uncertain inflation prospects and a weak currency could rule out a cut tomorrow, according to Klaus Baader at Lehman Brothers.

The macro-economic outlook for Europe has been brightening recently, helped by the budding recovery in Asia and Latin America and stubbornly robust growth in the US. Salomon Smith Barney increased its 1999 earnings per share estimate for Europe from 4 to 7 per cent yesterday. But the revisions do not necessarily spell good news for markets.

According to Mark Howdle, European strategist at Salomon, continental equity prices will come under pressure in the next quarter because of heavy supply, totalling $30bn in new share issues in the euro-zone alone.

In Asia, markets posted healthy-looking gains. South Korea rose 3.1 per cent while Australia gained 2 per cent, reaching a record high. Malaysia and Singapore also performed well but Japan started the quarter with a modest 1 per cent advance.

According to Crédit Lyonnais Securities, international investors have doubled their weekly flows of funds towards Japanese equities in the last few weeks.

But the country remains the sick man of Asia, according to the bank's European equity team. With economic growth under pressure from unemployment, sluggish consumption and corporate restructuring, last month's rally could be short-lived.

EMERGING MARKET FOCUS

Bratislava stays in the doldrums

Bratislava stock exchange has had a desperate year but this has little to do with the woes of other emerging markets and simply reflects the continuing lack of interest in Slovakia's young bourse.

In October, the Sax index of the top 16 shares fell for the first time below its 1993 starting level, and in 1998 overall it declined 48.5 per cent. This year it has continued to drift down and hit an all-time low of 80.35 last month.

Volumes shrunk by 55 per cent last year and in March they achieved a daily average of only Sk58m.

Even the election defeat in September of Vladimir Meciar, the former prime minister blamed for putting off foreign investors, failed to lift the market. Investors seemed more concerned with economic instability and poor corporate performance.

These worries have intensified this year with rapidly slowing growth adding to the existing problems with the current account and budget deficits and growing foreign indebtedness.

GDP growth in the fourth quarter fell to 0.5 per cent and with an austerity budget and slowdowns in the country's main trading partners, most analysts expect growth to fall to under 2 per cent from 4.4 per cent last year.

The corporate sector is also suffering from high indebtedness, high real interest rates and a credit squeeze from the fragile banking sector. Many big companies that chose to borrow abroad are now having to make provisions after the crown devalued in October.

Slovnaft, the oil refiner representing almost half the index, reported 1998 profits down two-thirds from low oil prices and the devaluation. Its share price fell 30 per cent last year but Lubo Soltys of brokers Wood & Co says the company is a good bet because it is well managed and just completing a big investment programme.

Slovakofarma, a generic drugs manufacturer which with Slovnaft has issued global depository receipts, is seen as a safe bet despite the crises in the health sectors in Slovakia and the Czech Republic, which led its share price to fall 60 per cent last year.

"If I had to choose a Slovak stock, I would pick Slovakofarma," says Dalibor Vavruska of ING Barings.

Slovakia's problem is that the recommendations end there. VSZ, the steel group, defaulted in November and is only a highly speculative investment, according to Michal Kustra of Tatra Banka. VUB, the main commercial bank, still fails to meet capital adequacy requirements.

The utilities that form the core of neighbouring markets are still in state hands and therefore the market has a capitalisation of only Sk150bn and is highly illiquid. Yet this could change this year if, as the government is discussing, Sk30bn of state privatisation bonds are exchanged for shares in state-owned companies such as Slovak Telecom.

"We need a new stock," says Barbora Lazarova, deputy head of the stock exchange. "This will be crucial for the stock market."

Robert Anderson

Dow drops back after record close

AMERICAS

Wall Street was mixed at midsession, with investors displaying less confidence after the market's record close on Monday, *writes John Labate in New York.*

But if the early buying lacked conviction, it certainly did not suggest a massive sell-off was imminent with the earnings reporting season just a few weeks away.

The fact that the market managed to rally on Monday on little news and sell off only modestly yesterday suggested underlying conviction that may be built on once companies start reporting earnings.

"Pre-announcements ahead of the corporate reports have been very benign," said Larry Wachtel, market analyst at Prudential Securities in New York. "As you get to the earnings season we'll have a legitimate reason to rally."

The Dow Jones Industrial Average was down 24.69 at 9,982.64 and the broader Standard & Poor's 500 index had lost 1.42 at 1,319.70 by midday. Stronger high-tech share prices helped the Nasdaq composite stay in positive territory, up 7.22 at 2,567.28, but small caps weakened, with the Russell 2000 index down less than a point at 402.27.

Gillette's warning on Monday that first-quarter sales would come in below expectations weighed on the market early in the session. The news sent shares of the global consumer products maker down more than 10 per cent or $6 11/16 to $50 13/16 in heavy volume. Gillette's tumble helped to put pressure on other consumer goods makers, with Procter & Gamble, a Dow member stock, off $⅝ at $100½.

In the telecoms sector speculation that MCI Worldcom was in early takeover talks with Nextel Communications sent MCI shares down $2⅞ to $89⅝ while giving Nextel a slight boost, up $1 11/16 at $40 3/16. Shares of Lucent Technologies surged $3¼ to $62¾ after the company announced a new product technology. America Online rose $3¾ to $170 11/16 after the company's acquisition of another internet company on Monday.

Retail stocks were mixed. Starbucks surged more than 5 per cent or $1 11/16 to $32¼ after it said its March same-store sales were up 6 per cent. But shares of consumer electronics retailer Circuit City fell $1½ to $73¾ after it reported its fourth-quarter results.

Among the gainers in the computer sector, Sun Microsystems climbed $6 5/16 to $136 5/16 and semiconductor chip producer LSI Logic gained $3¾ to $35¾.

TORONTO was mixed at midsession as a strong performance by banking stocks was largely offset by declines in metals and minerals, oil and gas, and the paper and forestry sectors.

The 300 composite index was 24.70 higher by midsession at 6,764.40 and analysts noted volume of 73m shares was unusually high.

Second rate cut in two weeks lifts São Paulo

SAO PAULO was up 2.1 per cent at midsession yesterday, buoyed by a cut in interest rates.

The Bovespa index rose 234 to 11,256, gaining ground for the second day running.

The country's central bank said a slowdown in inflation allowed it to cut interest rates, for the second time in two weeks, to 39.5 from 42 per cent.

CARACAS was also strong, boosted by rising oil prices and gains in neighbouring markets. The IBC index was 139.51 or 3.3 per cent higher to 4,431.34 in early trading.

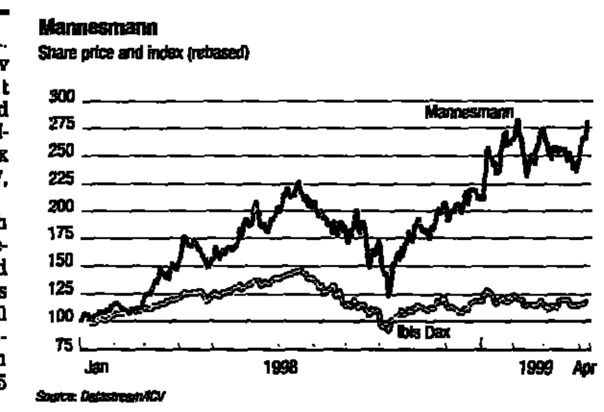
MEXICO CITY marked a pause after an early rise prompted by gains in the American Depositary Receipts of telecom giant Telmex. Shares in the company were trading 0.70 pesos higher to 33 pesos at midsession, while the IPC index was up 21.70 to 5,123.64.

Bourses rise on Kosovo offer

EUROPE

News of the Yugoslav ceasefire in Kosovo sent **FRANKFURT** steeply ahead in the dying minutes of trading, lifting the Xetra Dax index to a close of 5,022.27, up 120.46 or 2.5 per cent.

Mannesmann, which acquired the fixed-line telecoms operations of Veba and RWE, rose €5.80 to €130 as investors warmed to the deal that increases Mannesmann's share of the German long-distance market to 15 per cent.



The news also sparked gains at Veba and RWE with what was seen as orderly withdrawal from the telecoms business lifting the former €1.91 to €50.65 and RWE €1.31 to €43.

Steel leader Thyssen rose to an eight-month high, adding €1.19 at €19.40. DaimlerChysler was a good market, partly catching up with the recent strong performance of the ADRs on Wall Street and responding to positive comment at Merrill Lynch. The stock gained €2.66 to €84.41.

Deutsche Bank, in negative territory for most of the session, hardened €1.05 at €49.15 in spite of joining Merrill Lynch's sell list. The broker said earnings downgrades were expected in the short term.

Elsewhere in the sector, HypoVereinsbank lost €2.33 at €52.17 on a German press report of possible top management changes. Insurer Allianz rose €13 to €293.

PARIS rose 1.8 per cent with the CAC-40 index settling 74.63 higher to 4,304.48 after a last-minute rally was sparked by Serbia's decision to sue for peace.

Volatile STMicroelectronics led the way, adding €5.60 or 6.1 per cent to €97.50, tracking overnight gains on Nasdaq. Fellow IT stock Cap Gemini retreated from intraday highs to close up €3.50 at €156.

Computer manufacturer Bull advanced 24 cents to €5.69 after its chairman reiterated a 1999 profits forecast and vowed to deliver improvements in 2000.

Oil issues were among the main gainers, boosted by weekend reports that a key Iraqi pipeline had been bombed. Total added €3.80 to €115 while Elf-Aquitaine gained €4.50 to €126.

Telecom stocks were stronger, with France Telecom up €2.60 to €79.90 while rival Alcatel closed €2.90 ahead to €111.90.

Canal Plus shot up €10.80 to €283.80 after a rise in subscribers in Telepiu, its Italian unit, raised hopes about activity in its other European operations.

AMSTERDAM was well supplied with firm features, notably among financials. Aegon gained €2.10 at €35.75 while ING rose €1.10 to €51.60, benefiting from optimism about US trading, an upgrade to buy at Morgan Stanley Dean Witter and solid results from a mortgage bank offshoot.

Hoogovens shared in the upturn for the steel sector, adding 60 cents at €31.65 as broker views on cyclicals turned positive. The AEX index ended up 2.71 at 536.34.

Oce, the copier group, rallied with a period of relative weakness said to be tempting the buyers. The shares, which stood at €35 in January, rose €1.15 or 5 per cent to €24.40.

ZURICH saw action in its small, high-tech issues in a largely dull market, with the SMI index rising 37.6 to 7,170. ABB was an exception, advancing SFr40 to SFr2,000 in the wake of an announcement of a $215m British power plant order.

Swisscom was another outperformer, rising SFr15 to SFr598, in spite of news that Finnish telecom operator Sonara cancelled a co-operation agreement.

High-tech stocks were carried along by recent US developments in the sector. Computer peripherals group Logitech rose SFr7 to SFr195, Kudelski, the electronics group, added SFr305 to SFr6,205 and Distefora, which recently took over two internet providers, rose SFr6 to SFr79 .

MADRID pressed ahead as the market adopted a confident attitude after several weeks of lethargy. The general index finished 21.10 or 2.4 per cent higher at 87.83.

The improved mood was reflected in strong demand for some blue chips, including Telefónica which soared €2.21 or 5.6 per cent to €41.50 on the view that it had become undervalued compared with its European telecoms peer group.

Activity also occurred in stocks that could fill the space in the Ibex-35 index, which will be made vacant by the merger of banks Santander and BCH. The pair will start trading as BSCH this month.

Among contenders, Superdiplo put on €1.11 to €23.14, Obrascon Huarte 19 cents to €10.19 and Seltia 55 cents to €16.50.

ISTANBUL climbed 4.1 per cent to a record closing high as expectations grew that the April 18 elections would produce a stable government that would press ahead with long-awaited restructuring of the economy.

The IMKB National-100 index finished 190.57 higher at 4,896.66, with investors also optimistic about the outlook for corporate profits reports for the first quarter.

MOSCOW tumbled 4.7 per cent as western investors pulled out, unnerved by doubts about new funding from the International Monetary Fund and tensions over Yugoslavia. The RTS-I index lost 3.73 to 75.51.

Written and edited by Michael Morgan, Jeffrey Brown and Peter Hall

Jo'burg industrials falter

SOUTH AFRICA

Johannesburg ran out of steam, with investors concerned that Wall Street could be due for a pullback after Monday's record close.

The overall index edged 4.2 higher to 6,406.8 while industrials pulled back from their best levels to close 16.9 weaker at 7,466.8.

A weak bullion price, which slipped to $278.50 an ounce in late trade, left the gold index index 49.0 lower at 2,853.8. JCI gold fell 20 cents to 400 cents.

News Corp powers Sydney higher

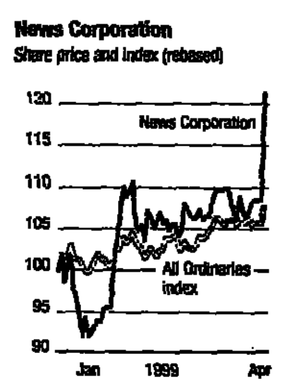
ASIA PACIFIC

SYDNEY rose to a record high – closing above 3,000 for the first time in heavy two-way volume – fired by dramatic gains for News Corp, the media giant.

The All Ordinaries index ended 59.5 higher at 3,032.9 and within a whisker of its session peak of 3,034.9 as an 11.8 per cent surge for News Corp sparked strong demand for a selection of blue chips.

News Corp, driven by its deal with AT&T telecoms group of the US – which brings the latter on board as an 8 per cent shareholder – gained A$1.38 to A$13.08 and was said to have accounted for about half of the increase in the benchmark index.

Commonwealth Bank rose 78 cents to A$26.92. In resources, BHP added 38 cents at A$13.94 and Woodside Petroleum 25 cents at A$9.60.



TOKYO enjoyed a last-minute boost which took the market to its highest level in eight months, *writes Michiyo Nakamoto.*

In earlier trading, the market suffered profit-taking in the notable absence of foreigners, who have been supporting Tokyo share prices in recent months.

However, towards the close, domestic investors came in to bargain-hunt, taking the benchmark Nikkei average up to its highest level since July last year. The Nikkei closed up 144.93 at 16,479.71 after fluctuating between a high of 16,494.27 and low of 16,084.71.

The mood was mixed as pessimism persisted about the prospects for economic recovery. Data released on Monday showed weaker-than-expected business sentiment while Japanese leaders cautioned against undue optimism.

The head of the economic planning agency warned yesterday that unemployment, which has been re-writing records during the past few months, could climb as high as 5.2 per cent.

Nevertheless, after sluggish trading during most of the day, a surge of buying towards the close lifted share prices to higher levels. The broad-based Topix index gained 15.44 to 1,322.61 and the Nikkei 300 3.45 to 266.12. Advancing issued outpaced declining ones by 725 to 474 and 129 issues were unchanged. Volume was a little higher than Monday's 558.70m at 568.10m.

Attention was focused on internet-related stocks after the Nasdaq composite index hit a record on Monday. Softbank hit a high of Y16,470 in its fourth straight gain before closing up Y1,520 at Y16,460.

Hitachi and Fujitsu gained after announcing they will form a joint venture to develop and market high resolution plasma display panels. Fujitsu rose Y5 to Y2,120 and Hitachi Y31 to Y949.

Exporting blue-chip companies were favoured. Sony gained Y310 to Y11,690 and Toyota Y80 to Y3,810. Even Nissan, which announced its group pension shortfall of Y580bn, gained Y21 at Y462.

KUALA LUMPUR shook off Monday's profit-taking mood to close 21.09 or 3.9 per cent higher at 556.93 on the composite index as investors took their cue from falling interest rates.

Commerce Asset, part of the Renong group, Malaysia's heaviest corporate borrower, jumped 40 cents to M$4.60.

SEOUL rose to its highest level since September 1997, with the composite index closing 19.95 or 3.1 per cent higher at 666.73.

Blue chips were in the limelight, with buying orders largely driven by local institutional investors.

Korea Electric Power Corp rose Won600 to Won31,500 while Hyundai Engineering and Construction added Won930 to Won10,100.

SINGAPORE closed higher, with the Straits Times index up 24.55 or 1.6 per cent to 1,606.15. Brokers said programme buying and retail investors drove the market to a 17-month high.

Banks led the pack, with the foreign tranche of United Overseas Bank closing 80 cents higher at S$12.20 and DBS foreign rising 50 cents to S$14.30.

BOMBAY recovered from early weakness as local funds turned buyers at the day's lower levels and speculators covered short positions. The BSE-30 index recovered from a low of 3,462.36 to close 50.08 or 1.4 per cent higher at 3,569.47.

The index tumbled 4.5 per cent on Monday as one of the coalition partners withdrew two ministers from the cabinet, prompting a government crisis.

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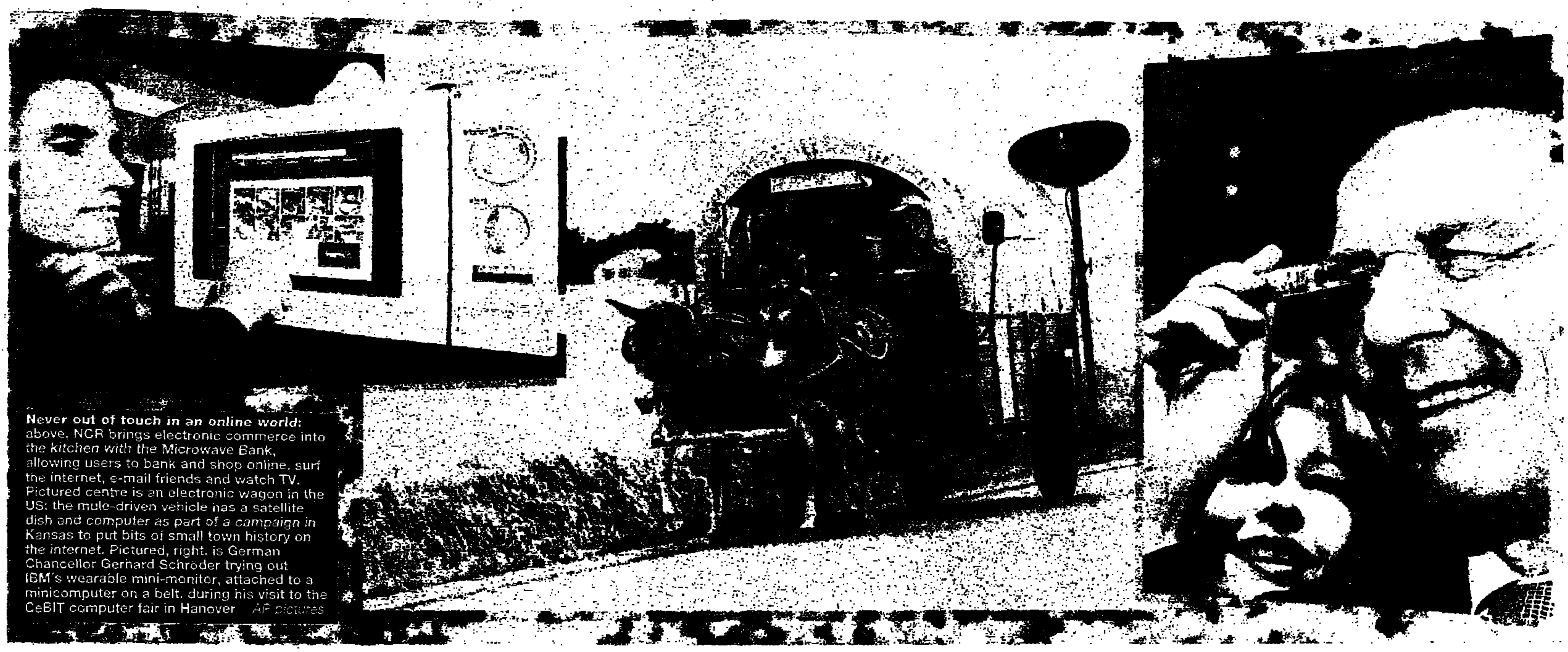
FINANCIAL TIMES SURVEY

INFORMATION TECHNOLOGY

WEDNESDAY APRIL 7 1999

Monthly series, next issue May 5, 1999



Never out of touch in an online world: above, NCR brings electronic commerce into the kitchen with the Microwave Bank, allowing users to bank and shop online, surf the internet, e-mail friends and watch TV. Pictured centre is an electronic wagon in the US: the mule-driven vehicle has a satellite dish and computer as part of a campaign in Kansas to put bits of small town history on the internet. Pictured, right, is German Chancellor Gerhard Schröder trying out IBM's wearable mini-monitor, attached to a minicomputer on a belt, during his visit to the CeBIT computer fair in Hanover *AP pictures*

How the internet will reshape worldwide business activity

In the emerging digital age of 'frictionless capitalism', companies will have to adapt quickly and cleverly or risk being overwhelmed by rivals, writes **Paul Taylor**

It was a succinct statement, but one with an almost revolutionary significance. "The internet changes everything," Bill Gates, Microsoft's chairman and chief executive, said in London recently. Like other US-based leaders in the information technology industry, he believes that companies and other organisations must put the net right at the centre of their strategic plans.

Indeed, the growth of the internet and electronic business has been likened to the industrial revolution of the 19th century – it is transforming most aspects of communications, manufacturing and commerce.

What is more, most information technology specialists believe the information revolution is still only in its infancy. Taking a historical view, Nathan Myhrvold, Microsoft's chief technology officer, sees parallels with the industrial revolution in the 19th century.

A hundred years ago, people thought the industrial revolution had already happened. But, he says, "it had only just begun". Since the commercialisation of the internet began in the mid-1990s, a whole new internet economy has emerged, comprising established companies that have made the transition and new competitors such as Amazon.com, eBay and E-Trade that did not even exist five years ago.

In the process, value chains are being picked apart and, in some cases, reassembled. The implications of this shift for companies and other organisations go far beyond the basic requirement of setting up a corporate web site and providing customers with an e-mail address as well as a telephone number.

"The web will fundamentally change customers' expectations about convenience, speed, comparability, price and service," say Gary Hamel and Jeff Sampler of the London Business School. Mr Hamel, who is chairman of Strategos, a San Francisco-based consulting firm and a visiting professor at LBS, believes the main threat facing companies is that prices will be driven down by consumers' ability to shop around using the internet.

This phenomenon, dubbed "frictionless capitalism" by Mr Gates, will make it harder for companies to make money using traditional business models, says Mr Hamel. And the pressures are mounting. At the end of last year, an estimated 128m people were connected to the internet, a figure that is expected to grow to more than 300m by 2005.

In Europe alone, analysts at Goldman Sachs, the US investment bank, forecast that by 2007, the most advanced western European economies will have reached or possibly even exceeded 70 per cent household internet penetration.

"Given the growth in access from mobile phones, other handheld devices and satellite delivered services such as Teledesic, this could also prove to be a conservative estimate," say the authors of the Goldman Sachs report, *Internet Portals in Europe*, published last month.

The development of household internet appliances and digital set-top boxes could also accelerate mass market internet adoption, particularly in Europe where digital television is being rolled out.

"We are moving rapidly towards 1bn connected computers," said Craig Barrett, Intel's chief executive, recently. "This does not just represent an online community: it represents the formation of a 'virtual' continent."

As the number of online consumers and businesses grows, the opportunity for conducting business-to-business and business-to-consumer electronic commerce grows exponentially. Indeed, Metcalfe's law, promulgated by Robert Metcalfe who invented the Ethernet networking protocol and went on to found 3Com, the US networking equipment group, states: "The value of a network is equivalent to the square of the number of nodes [connected to it]."

Certainly, in terms of electronic commerce, Metcalfe's law appears to be holding true. Estimates of the scale of e-commerce vary sharply, but International Data Corporation, the market research company, estimates that worldwide e-commerce revenues will grow to $623bn in 2002, up from just $41bn last year. Of those figures, western Europe accounts for $223bn in 2002, a steep rise from $6bn last year.

In the US, the Yankee Group forecasts that business-to-business internet commerce transactions will reach $139bn next year. "With such activity, opportunities abound," said a year-end report by the group on internet futures.

"Western Europe is still substantially behind the US in terms of e-commerce, but it is growing at a faster rate," says Pat Gelsinger, Intel's general manager. This astonishing growth is also reflected in other figures. For example the volume of internet traffic will surpass voice traffic next year, according to Datamonitor, another market research company.

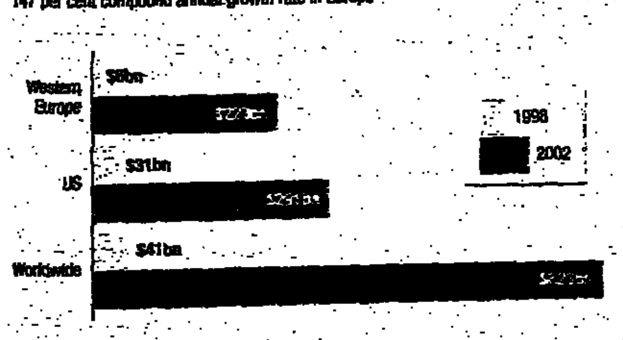
Already, IP-based (internet protocol) traffic exceeds voice traffic in several big markets, including the US and UK. "IP traffic is currently rising at around 1,000 per cent a year, compared to PSTN (public switched telephone network) growth of under 10 per cent," says Datamonitor.

By 2002, it predicts that internet traffic will have grown to 6,170Pb (petabytes – a million gigabytes), up from 18.4Pb last year. Datamonitor forecasts that for consumers, the high demand for internet bandwidth will be driven by the increasing number of internet users using next generation access technologies such as xDSL (digital subscriber line) and cable modems.

"Meanwhile, the growing reliance of enterprises on the internet as a real business tool will also ensure a continued traffic explosion." Despite this growth, earlier forecasts that the internet would grind to a halt have proved incorrect. Inktomi, the California-based start-up, can claim much of the credit for keeping the internet running,

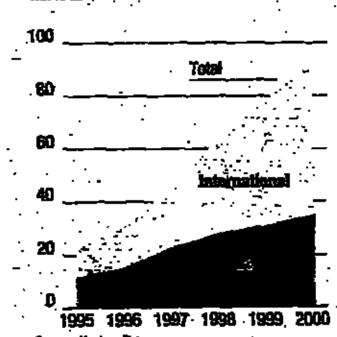
Turn to next page

Electronic commerce revenue soars
147 per cent compound annual growth rate in Europe



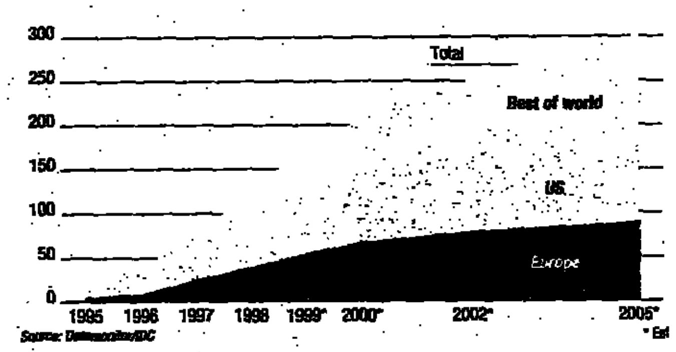
Source: IDC, December 1998 (Europe), July 1998 (US and Worldwide)

Worldwide online households
Millions

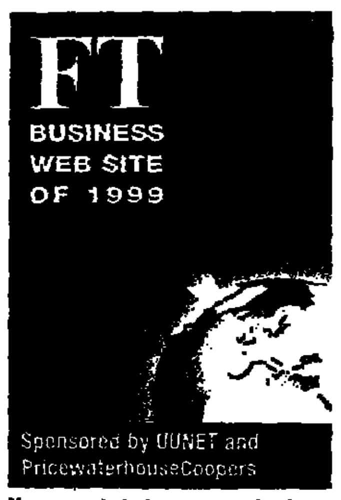


Source: Yankee Group

Growth of the global online population
Millions



Source: Datamonitor/IDC



New awards to be won: see business web site competition details on *page 8 of this review*

FUTURE OF THE INTERNET by Tom Foremski

The next generation shows its potential

Internet2 will lead to a huge increase in the speed of communication, thus giving a further boost to global e-business

The future of the internet is best described in terms of more bandwidth, more types of devices capable of accessing the internet and wireless connections that extend the internet to millions of users.

Unlike some other computer technologies, the internet offers an ever-expanding vista of progress. It is far from a static medium and continues to grow and absorb huge numbers of new users worldwide and carry enormous amounts of data. Its strength is the adoption of technology standards such as the internet protocol (IP) which defines how the packets of data are carried over the internet.

With such standards in place, an environment is created in which companies can develop faster data communications both in the main backbones at the heart of the internet and at the user end, with faster modems using cable TV or telephone wire connections.

To see what the future of the internet will bring, it is best to look at some of the next generation internet networks being built in the US. The key one is "internet2", a private high speed network that seeks to link more than 130 university and government research centres.

This network will have a 2.4 gigabit per second data transmission rate and, because it is a private network, will not have the same congestion problems affecting the public internet. This will enable internet2 users to communicate at speeds as much as 1,000 times faster than regular internet users.

The internet2 project has attracted virtually all the major US communications companies. They are contributing equipment and staff to help build internet2 and in return, gaining valuable experience in developing key technologies for applying to the public internet.

IBM is a key participant in internet2 and predicts that the key applications developed for the network will quickly make their way into the commercial market.

"Internet2 applications are advanced applications that will help benefit many companies with improved services and make the concept of e-business into a reality," says John Parker, vice president of internet technology at IBM.

A key focus for IBM has been its involvement in helping build the $500m Abilene network which is a key part of internet2 and recently went live, linking about 50 university research centres. These centres are primarily interested in sharing huge amounts of data produced by their supercomputers, as well as in gaining remote access to expensive research equipment such as high-end electron microscopes and medical imaging equipment.

Such applications would be impossible on the public internet because of the data congestion. But internet2 applications will help to improve the public internet by distinguishing between the different types of data.

"The IP protocol works well, but it treats all data packets equally. What we need is a way to distinguish between IP packets that contain real-time data and those that are less time sensitive," explains Mr Parker.

IBM and other companies are using the internet2 network to test new technologies that offer a distinct Quality of Service (QoS). Companies would be able to designate certain IP data packets as high priority, allowing these to reach their destinations ahead of less urgent data packets. They would pay more for a specific QoS service, but it would allow them to use the congested internet in a manner that is impossible today.

With QoS, for example, a company would be able to use the internet for videoconferencing, full-screen distance learning applications, real-time monitoring of production lines and supply chains, and many other applications. "The applications that we develop for internet2 will find their way into commercial use within months rather than years when compared with earlier internet technologies," says Mr Parker.

But will this mean that those individuals or companies that are not able to pay extra for QoS services have to suffer even slower internet speeds? Mr Parker says that will not happen. "If you are sending an e-mail, for example, most of the delay in delivery is at the mail server end, and it won't matter if it arrives a few minutes later than usual. But if you are running a real-time application you need to make sure that that data receives priority."

The future internet is also wireless. US and European computer and communications firms are working on extending the internet through wireless communications to hand-held computer devices, smart phones and new types of consumer electronic devices.

"Extending the tendrils of the internet through wireless links makes a lot of sense" says David Birch, director of UK consultancy Hyperion. "In Europe, for example, there are more cellular phone users than there are PC users."

Motorola recently announced an alliance with leading network equipment company Cisco Systems to invest more than $1bn over the next four to five years to build a wireless internet. The two companies will develop hardware and software standards to simplify the connection of wireless devices to the internet.

Microsoft announced an alliance with British Telecom to create wireless internet services based on devices using Microsoft's Windows CE operating system. The two companies said that the first trials of such a system will begin in the UK later this spring on BT devices using a small web browser developed by Microsoft called a "microbrowser".

And Nortel Networks, the Canadian communications equipment group, announced what it calls its "Webtone" service, an IP-based communications network providing users of wireless communications devices with access to the internet. "Mobile Webtone will profoundly change the way we think about wireless communications," says John Roth, Nortel's chief executive. "It will literally put the Net in your pocket, combining the power of data with the convenience of mobility for anytime, anywhere access to information and services over the internet from any information appliance."

The internet of the future will be less PC-based and much more useful. With wireless links and IP communications through electric power lines, the potential exists to link all types of electronics devices in a universal network with incredible applications.

During a five-day trip to China, Eckhard Pfeiffer, president of Compaq Computer, watches 12-year-old Zhand Ruisi use the internet in a Beijing classroom AP

FT IT

Key reports on the web

Visit the FT web site, **www.FT.com** for up-to-the minute information, news and analysis. The main features of this month's FT-IT Review, as well as our latest special report on Electronic Business, can also be found on the FT web site at: **www.FT.com/ftit/**

Facing up to the online impact

From page one:

despite the doomsayers.

Caching software developed by the US company has enabled many of the largest internet infrastructure and media companies to cope with the exponential growth of internet users, web sites and network traffic.

Nevertheless, this huge rise in predicted internet traffic is forcing both traditional telecoms operators and the "new-telco" startups to invest fortunes in bandwidth-rich optical networks.

According to Datamonitor, the internet backbone market, dominated by a handful of providers including MCI WorldCom, Sprint, Cable and Wireless and Internex, is worth about $8bn a year – a figure which includes all the revenues received by carriers and ISPs (internet service providers) for the provision of IP infrastructure to support the public internet.

But that figure is set to grow to $19bn by 2002, with non-US markets playing an increasing role in this expansion. Investment in IP networks by large telecoms operators has been especially high recently. "The major telcos have realised the potential threat, as well as the tremendous opportunity, that the shift towards internet technologies presents to their evolving business focus," says Philip Coding, a Datamonitor consultant.

"The infrastructure of the public network is rapidly expanding and improving due to the increasing commercialisation of the internet and a focus by service providers on ensuring service levels," says the Datamonitor report. The largest telecoms operators are realising the potential of IP and are building out global networks to support their improved provisions."

Looking ahead, combined voice and data networks will be crucial assets for the big telecoms carriers. With voice and data network fusion, Datamonitor predicts that the resulting improved bandwidth will drive online video applications.

This should further expand the internet "cloud" and open up the public network to new users. "Future internet access devices will also be key in this move into mass markets, with digital TV and mobile access devices playing a particularly significant role."

Meanwhile, as competition increases, Datamonitor predicts that the cost of transferring a terabyte (1,000 gigabytes, equivalent to 300m pages of text) of data across the public network will fall from $80,000 last year to under $10,000 by the year 2000. By 2003, it will have fallen to just $300 or 0.3 per cent of today's cost.

"The principal reason for this dramatic reduction in transfer costs is a bandwidth explosion driven by new technologies, new market entrants and the general public IP network build-out which will force prices down," says Andrew Ponsford of Datamonitor.

"Falling prices will in turn drive internet traffic volumes and service uptake. This trend is also good news for those enterprises seeking to move towards internet-centric business models, as plunging backbone costs and increasing backbone capacity will drive cheaper and more sophisticated services."

Internet technology experts such as John Patrick, IBM's vice president for internet technology, believe the substantial upgrading of the internet infrastructure now under way will enable it to stay ahead of demand.

This optimism is reflected in projects such as internet3, a global network being developed by about 100 US universities and leading IT companies, including IBM. Its goal is to develop the technologies needed to support high bandwidths required by applications such as live video.

Internet2 is expected to be 100 to 1,000 times faster than today's internet. It will also support Quality of Service (QoS), allowing two host computers to establish a connection with a guaranteed bandwidth.

However, as technology gurus know, predictions can be risky. The Yankee Group notes: "Considering that in five short years, the internet has become a major platform for connecting individuals and businesses, distributing information, conducting commerce and entertaining people, predicting what may happen over the next 12 months is a bit like chasing a speeding train."

But all internet market participants, electronic retailers, content providers, internet service providers, interactive advertising agencies and telecoms companies would have to watch closely for what may be coming down the tunnel "or risk getting run over".

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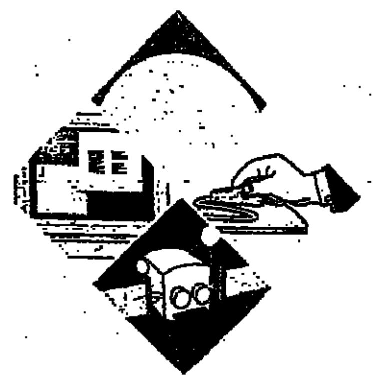

The FT Review of Information Technology

This review is published on the first Wednesday of the month. In addition, information technology articles appear regularly in 'Inside Track' in section one of the FT. The IT Appointments section is also published each Wednesday.

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INTERNET STOCKS by Roger Taylor in San Francisco

Investors' nerves are tested to the limit

In spite of worrying signs that internet stocks are over-valued, many of the leading analysts in the sector remain bullish about companies' prospects

The rise of internet stocks over the past few years is a phenomenon that has few, if any, parallels in stock market history.

To the extent that there *are* past parallels, commentators usually choose to compare it to irrational bubbles that have ended with a crash – biotechnology stocks in the 1980s, electricity stocks earlier this century. The assumption is that the internet stocks must go the same way in due course.

To back up that assumption, there are a host of astonishing figures:

□ Companies such as Amazon.com, the online bookseller, valued at $20bn even though it has never made a profit.

□ Businesses such as eBay, the auctioneer, valued at 2,000 times prospective earnings estimates.

□ And companies such as Yahoo!, the internet portal, that own almost nothing in the way of assets and yet command a market value larger than that of Boeing, the aircraft manufacturer.

As if more evidence was needed, the indiscriminate behaviour of many internet investors backs up the view that this is an investment craze that will come to a nasty end. Internet IPOs (initial public offerings) have set a series of new records for the biggest ever first day jump in value.

Currently, TheGlobe.com – a designer of online chat rooms and other "community" sites – holds first place with a 900 per cent appreciation within hours of the shares coming to the market. But seemingly, any new internet share is guaranteed a similar reception.

Private investors are largely responsible for this extreme volatility – particularly online investors who use internet brokerage accounts to trade rapidly in and out of internet stocks. These people are largely momentum investors. They care nothing about the economic fundamentals underpinning any business. They look for shares that are on a rising trend – and they buy.

If enough other people buy, the sheer weight of money helps propel the share prices ever higher. However, despite all the worrying signs, there is still a good deal of doubt among analysts as to whether internet stocks really are overvalued. Indeed, many of the leading analysts in the sector remain bullish.

The reason is that the internet is not just a stock market phenomenon. The statistics for the growth of the internet itself are, in fact, just as remarkable as the statistics on the rise on internet stocks.

The internet has been commercially available for little more than five years. But it is already used by over 20 per cent of Americans – more than 80m people – a number that has doubled in the last year and continues to grow at an astonishing rate.

Even more impressive are the figures on how users regard the internet. A survey conducted by America Online found that of 1,000 internet users, over two-thirds said that if they were stuck on a desert island they would rather have an internet connection than either a TV or a telephone.

Stock market phenomenom: traders watch screens on the floor of the New York Stock Exchange – innovative companies on the internet stand a chance of becoming the mega-corporations of the online era, driving share prices even higher AP

Mary Meeker, internet analyst at Morgan Stanley Dean Witter, the US investment bank, quotes the research in support of her continued optimism about internet stocks.

If the way the internet is developing continues, she says: "Shares of many of the leaders are, yes, cheap – why? It's simple; the market opportunities are really large."

To take one example, Amazon.com has about 90 per cent of the online book market. The rate at which consumers are switching their buying habits to obtaining books over the internet suggests that a substantial proportion of the total book market will transfer to the internet. The total market is worth about $85bn.

There is nothing absurd about the idea that Amazon could, in a relatively short period of time, be taking a substantial percentage of that market. Throw in its success at selling CDs, videos and its plan to move into a host of other areas, and a $20bn valuation starts to look more reasonable.

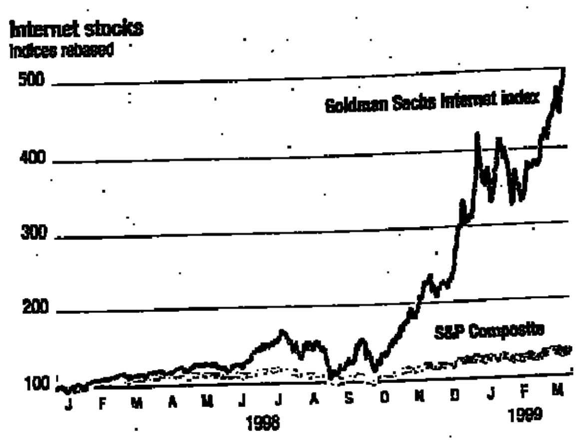
Yet not all analysts are so sanguine. Deutsche Bank has warned that 1999 could see a slowdown in internet growth which could provoke a harsh backlash from investors. The German bank also warns that most internet valuations assume every company will execute its business plan perfectly.

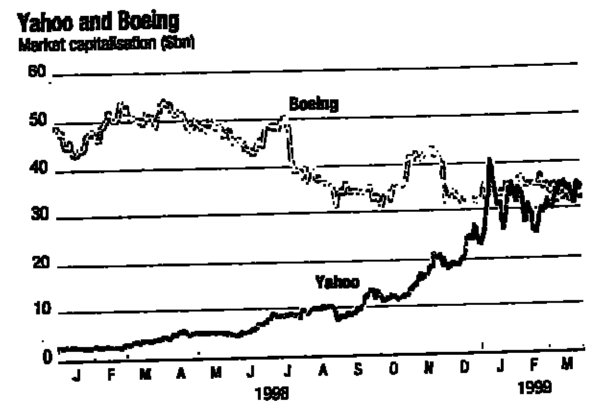
Although most of the internet leaders have so far managed to beat every expectation, there are bound to be some disappointments. Almost everyone expects to see some of the second line internet stocks run into trouble this year.

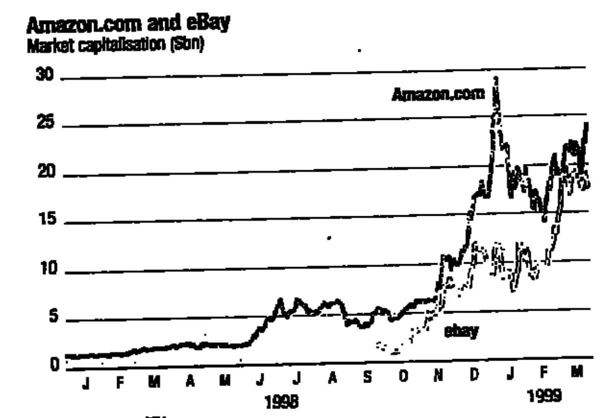
There is simply not room enough in the market for all of them to produce the revenue growth they are seeking. Some of the less popular media sites are already struggling to attract advertising revenues. Any disappointment could easily trigger a flight from the sector, causing a sharp correction.

Most commentators expect the market to continue to be extremely volatile. Some even anticipate an extended period of subdued performance following the astonishing performance in 1998. The first quarter of 1999 has already shown signs of weakness.

However, the growing consensus is that the internet stock boom will not prove to be simply another instance of tulipmania. The leading companies of the internet, such as America Online, Yahoo! and Amazon, stand a good chance of becoming the mega-corporations of the internet era. If so, there is plenty of scope for the share prices to rise even higher.







Source: Datastream/ICV

INTELLECTUAL PROPERTY by Philip Manchester

The fight for protection

Keeping track of copyright infringement is a struggle as digital technology simplifies the copying of all types of data

Advances in technology have always threatened vested interests. Copyright owners have, perhaps, suffered more than most in the last half century. Successive waves of technology from the photocopier to the digital computer have made copying easy and copyright protection difficult.

Digital technology poses a double threat. Firstly, any intellectual property encoded as a digital data stream, can be copied "perfectly". Secondly, when combined with the internet, digital technology also threatens traditional methods of distribution. Text, images, audio, video – even software – are increasingly distributed electronically. Researcher Jupiter Communications expects worldwide online music revenues to reach $1.6bn by 2002.

Current technology-based protection methods – such as digital watermarks and anti-copying devices – only deal with part of the problem. International proposals to update legislation and prevent breach of copyright are in the pipeline. But many loopholes remain and some proposed legislation could delay the expansion of electronic commerce.

This is not new, of course. Copyright owners have always fought hard to protect their rights – often by stifling technology. Publishers tried to restrict photocopiers in the 1960s. The recording industry fought hard to stop development of the magnetic cassette recorders – and every subsequent innovation in recording technology. Film makers tried to stop the spread of low cost video cassette recorders.

Yet despite the threat to intellectual property, the technology spread and the industries thrived. Last year MP3, a technique for audio data compression, became a *cause celèbre* for the recording industry.

MP3 cuts the number of bits needed to carry stereo audio signals so that only about a megabyte of memory is needed for a minute's worth of CD-quality digital audio – a tenth of the size needed for a conventional digital audio file. MP3 makes high-quality audio transmission over the internet possible and opens up a new and virtually free distribution channel.

The arrival of the first portable MP3 player last year met with calls to ban such devices and a clamp down on web sites carrying copyright MP3 material. But in February, Lycos, the internet search directory company, estimated that over 500,000 MP3 files were available on the internet.

"They thought they could kill it – but in the last six months it has become clear that they can't," says Dominic Cameron founder and director of AZTEC internet, a European digital media consultancy. A recently announced alliance between InterTrust, a specialist in data protection, and Germany's Fraunhofer Institute – the main architect of the MP3 technology – could allay some of the recording industry's fears.

Limitations of anti-copying

InterTrust and Fraunhofer aim to build anti-copying features into the MP3 technology, making it impossible to re-copy MP3 files taken off the internet. Mr Cameron acknowledges that anti-copying will help, but notes that there are limitations. "Anti-copying has been quite successful at protecting analogue satellite television content. There are moves to apply similar technology to digital content, but it is more difficult."

Anti-copying measures can also pose a threat to the advance of electronic commerce. Nana Mouskouri, the Greek pop singer and member of the European parliament, threw Europe's IT industry into a panic earlier this year over proposed measures to prevent "caching" of copyright data in web server computers. Caching is a technique used to speed up web access by storing copies of data on alternative servers. The measures, now under consideration by the European parliament, call for caching to be outlawed. IT industry lobbyists say this is an unfair restriction and will prejudice the performance of the internet.

"All the brouhaha is really nothing to do with caching; it is more about the worry over MP3," says David Griffiths, European managing director of InfoLibria, a US specialist in web caching systems. "The point is that caches don't exist for MP3 content. If you really want to protect intellectual property then you don't allow it to be copied to a cache."

He believes that the legislation is unnecessary because there are many other ways that copyright owners can protect their interests. "You can use a password system, then transmit the content using a file transfer or some other mechanism that only allows authorised people to access the content."

Frank Cona, president of IP Warehouse, the US-based intellectual property protection specialist, says automation can also help in policing copyright infringement. "We specialise in monitoring infringement on the internet. It would be impossible to do this manually, so we have a program that examines web pages and checks for any copyright infringement. Any infringing web pages are time-stamped, stored and used as evidence of copying. The US courts have accepted this as evidence and it has led to successful prosecutions."

John Frank, director of law and copyright affairs for Microsoft Europe, sees encryption as one of the best methods of protecting intellectual property in the new environment.

He also argues that legislators must take a broader view of the technology and not penalise the manufacturers. "The heated debate in Brussels and Strasbourg over copyright has led to some good changes in the law. But there is still some work to do in the technical measures. The PC should not be seen as a circumvention device for infringing copyright and encryption services will enable people to protect their intellectual property."

While he accepts that it is difficult to protect intellectual property in the new environment – regardless of what legislation is in place – Mr Frank points to the software industry as a successful model of effective policing. "The legislation is all very well – the hard part is effective protection and deterrents. The Business Software Alliance, a group of software vendors that have joined together to fight software piracy, is bringing cases of software copyright infringements and showing it can be done. But we still need more effective deterrents like jail sentences and confiscation of assets."

BROADBAND ACCESS by Paul Taylor

Online rules will be rewritten as speeds rise dramatically

Livelier content and improved services will transform the internet when users are no longer constrained by slow access

Internet access will undergo a radical transformation over the next few years as current business and consumer access methods are replaced by high-speed "broadband" technologies such as cable modems, xDSL (digital subscriber line) and wireless systems.

These technologies will enable internet access at speeds of up to 10Mb/s (Megabits per second), in other words several hundred times as fast as today's quickest "narrowband" modems, and provide "always on" connections.

As a result, they have the potential to transform the internet by delivering multi-media-rich services and electronic commerce.

"The long-awaited technological discontinuity known as broadband is about to rewrite the rules of the internet access game," say the authors of a McKinsey Quarterly article called *The Last Mile to the Internet*.

"Downloading web pages with narrowband technology has been likened to sucking jello through a straw," the McKinsey authors say.

"Broadband technologies, on the other hand, promise to deliver crisp text, video and sound as quickly as if the user were watching television."

The launch of broadband access technologies, which has already begun in the US and some parts of Europe, also has the potential to restructure the emerging internet access business.

"Having overcome their initial reluctance to join the fray, cable telephone and satellite companies are now competing in a quickening race to deliver broadband service to personal computers in consumers' homes," said the report.

This race is set to transform the users, the technology and the economics of internet access.

In particular, the new technology is able to create a broadband "last mile" to the home that can be used by cable and other companies to attack the narrowband local loop in which the regional Bell operating companies in the US have long held monopoly privileges.

"Since America Online and other internet service providers have no automatic or guaranteed access to customers who use broadband technology to get onto the internet, broadband may have the power to determine who wins and who loses in the internet access industry."

Similarly, Goldman Sachs analysts, in a new report on internet portals in Europe, note that "the key differentiating factors between ISPs will be data capacity and speed ... there are many different networks vying to become the one of choice".

The technologies underpinning broadband internet access have been around for several years, but have only recently begun to be deployed.

In the US and Europe, telecommunications operators have been reluctant to deploy new broadband access technologies. This is because of their concerns that it would cannibalise their highly lucrative ISDN (integrated services digital network) and leased-line services including T1 lines in the US and E1 links in Europe which are offered to business customers at premium rates.

Cable TV companies have often been constrained by a lack of funds, as in Britain where the systems are relatively new, or by the need to upgrade ageing infrastructure in many continental European countries and the US.

The McKinsey authors argue that the competitive

'The race is on to become the dominant broadband access technology'

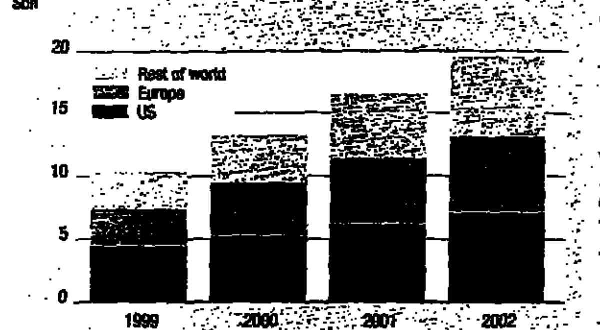
landscape has been changed by the arrival of digital satellite services in the US and now across Europe, which has forced cable operators to accelerate the upgrading of their systems in order to remain competitive – an upgrade which also enables them to offer high speed two-way internet access at relatively low costs.

Broadband internet access is based upon several technologies, each backed by a different industry group. Telecoms operators are backing xDSL technology which itself comes in several different "flavours" including ADSL (asynchronous DSL), which typically provides up to 8Mb/s over existing copper telephone lines.

Meanwhile, the cable companies are backing cable modems which can offer up to 10Mb/s over a shared cable network, although data rates fall as more people connect. However, in some countries, such as the UK, where most cable operators installed two "twisted pair" phone lines along with their hybrid coax/fibre networks, cable companies could also choose to offer ADSL connections to home consumers.

More and more wireless competitors are betting on local multipoint distribution systems (LMDS), multichannel multipoint distribution systems (MMDS), satellite technologies and new technologies like powerline systems which use existing electricity lines.

Worldwide internet backbone market



Source: Datamonitor

"Of these technologies, cable modems and xDSL are the most viable in the next three to five years," say the McKinsey consultants.

"Satellite's infrastructure costs make it too expensive for the consumer segment. Wireless technologies that might challenge cable modems and xDSL are still in their infancy."

Meanwhile, the cost of cable and xDSL access is falling fast, bringing them into the price range of $30 to $50 per subscriber per month.

Indeed, in areas where these technologies are available, the adoption rates for xDSL and cable are higher than those for comparable new technologies in the past.

Most analysts forecast that the number of broadband internet access customers will climb steeply from around 100,000 today to about 12.5m in 2002.

So the race is on to become the dominant broadband access technology. According to Insight Research, the US market research company, US internet consumers will spend about $1.2bn on high speed access this year, but Insight warns that consumers will only be willing to pay once for a broadband connection device.

"With competing xDSL modems and cable modems selling at around $250-$300 each, the broadband modem that reaches the mass market first will capture an initial base of customers who will be reluctant to pay again to switch technologies."

In a report published a few months ago called *Consumer Demand for Broadband Services: xDSL, Cable Modems*

Turn to next page

CONTENT SAFEGUARDS by Michael Dempsey

Data freedom has its risks

Online abuses have become the target of those seeking to preserve their reputation and protect the integrity of the internet

New employees at Zeneca, the UK pharmaceuticals and agrochemicals giant, are being asked to sign a code of conduct. Its purpose is not to regulate the way they behave but to lay down the way they should use the internet.

The code points out the risks involved if staff access sites that contain illegal or objectionable material. It states that internet use is being granted for business purposes only.

It thus allows Zeneca executives to demonstrate to third parties that the company has the best intentions in allowing its staff onto the world wide web. Above all, it shows that large corporations are beginning to acknowledge the risks of permitting unfettered internet access.

Nick Lockett, a London-based lawyer with the US law firm of Sidley and Austin, specialises in the impact of information technology on legal liability. Asked to highlight the biggest risk to widespread use of the internet, he says: "There are all sorts of issues here, but the main idea is to prevent legal liability coming back to the employer. This happens through incidents where staff send out illegally copied software via e-mail, or where an e-mail contains libellous or defamatory statements."

Mr Lockett regularly briefs clients on the implications of e-mail and web use, helping to create a practical internal policy for using this technology, while avoiding the legal traps that go with it. Why have there been relatively few cases of companies being sued for employee activity over the internet?

"I think a lot of companies are being lucky. We are beginning to see cases in the US where a firm is sued and e-mail records are seized." He is very concerned that employees are failing to grasp the full significance of e-mail.

An e-mail communication has the same weight in law as a letter on company notepaper. Yet many staff are sending highly controversial opinions over e-mail in the belief that this is an invisible form of communication. This is extremely dangerous. "If you wouldn't put something in an internal memo, then don't put it on an e-mail," says Mr Lockett.

Sidley and Austin's recommended policy on e-mail stresses that "infringement of intellectual property rights does not require knowledge". This is a sentiment echoed by Neil Barrett, a senior scientist at Bull, the French computer group, who has a special interest in the security of electronic communications.

"You can be open to court action due to e-mails, offensive advertising or incitement to racial hatred. Almost anything which is considered an offence outside of the world of computers is an offence when it's online."

This message was brought home forcefully by a court in Portland, Oregon, in February. A group of US anti-abortion activists had posted the names and addresses of surgeons working in abortion clinics on a web site. Those doctors and clinic staff murdered by fanatics had a cross drawn through their personal details.

Damages

After seven murders at clinics during a five-year period, the court ruled that the way in which personal details were posted constituted threats. The group was ordered to pay $107m in damages for putting out what clearly amounted to a hit list.

Intervention by the US legal system in defining acceptable content is symptomatic of an international trend. The internet developed in an academic and intellectual environment on the west coast of the US, where liberalism translates into tolerance for all forms of content, however extreme. This extends to material that most people would find highly offensive.

As the internet moves out into a wider community, however, boundaries are being drawn. Australia, for example, is introducing a law that will make internet service providers (ISPs) legally liable for editorial content. In France, the government has placed an obligation on the companies that provide points of access to the web to provide software for clients that enables the blocking of certain services.

Now under debate in Germany is the Information and Communications Services Bill. This is particularly concerned with the proliferation of neo-Nazi material and propagation of the "Holocaust Lie", the denial by some right-wing extremists that the Holocaust ever took place. The bill proposes that ISPs must take responsibility for content.

At Planet Online, which claims to be the largest hoster of web sites in Europe – operating over 2,000 sites and running the FreeServe internet service for Dixons, the UK consumer electronics retailer – managing director John Beaumont rejects the idea that he should take responsibility for content. "Censorship is not the role of an ISP. It is the job of government. There are some areas that clearly do need control in order to protect the customer, but the ISP is not the right body for that control."

Mr Beaumont argues that the use of employment contracts is one way to encourage "the sort of behaviour you would expect from your people".

Zeneca uses a computer program called Cyber Patrol – supplied by The Learning Company (TLC) of the UK – to help it reinforce its code of conduct. This resides at the firewall security control on Zeneca's internet gateways and works by measuring internet access requests against its own list of prohibited sites.

Users specify a series of categories such as violence/profanity that allow Cyber Patrol to filter incoming messages. The critical aspect of this software is that TLC updates the filter on a weekly basis, compiling new lists of banned material as fresh sites emerge and extreme groups redraw their entries.

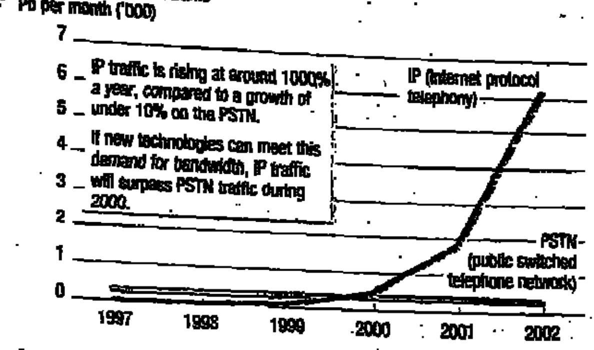
Alan Pickup, a network manager at Zeneca, says Cyber Patrol was introduced two years ago. "We have around half of our desktop PCs enabled to access the internet. This software just gives us an added assurance that staff are following best practice. If they try to log on to a banned site, they get a message popping up to tell them that access is barred."

Mr Pickup says staff have not complained about censorship. "Generally, people get the message the first time they see the 'access barred' screen."

IP traffic rising by 1,000 per cent a year

Forecast IP and PSTN traffic

Pb per month ('000)



Source: Datamonitor

Speedier access

From previous page:

and Wireless. Insight notes: "It is a race to market between the telcos with xDSL service and competing multiple system operators with cable modems."

The report suggests two scenarios. The first assumes the Universal ADSL Working Group (UAWG) develops an xDSL technology which becomes a built-in standard for the next PC generation. The second assumes cable operators will roll out system upgrades and that consumers will opt for the slightly faster service which cable modems should provide.

In both scenarios, cable modems are expected to lead in market share by 2003. "XDSL's main advantage is that it can be marketed and sold by the local telcos to the consumer market in the same way that they market other services," says Robert Rosenberg, Insight's president. "However, cable already covers 70 per cent of all households [in the US] and cable operators appear to be rolling out their high-speed service faster than the incumbent telephone companies."

The Strategis Group, another telecoms market research company, suggests there will be 6.2m cable modem households in the US by 2003, against about 500,000 today, and that some 9.1m households will subscribe to a broadband service by 2003, making it a market worth $3.8bn. In contrast, it believes there will be 2.9m xDSL customers in the US in 2003, with most growth after next year.

The adoption of G.lite, a new xDSL standard, in October is widely seen as crucial to its growth prospects. This is a consumer-oriented version of ADSL and will allow consumers to install the equipment themselves. Currently, cable and xDSL modems need to be installed by technicians.

As use of xDSL and cable modems grows, most analysts expect ISDN leased lines to lose market share. Until now, ISDN has offered the fastest access for most home users, though in some markets such as the UK, high installation and rental costs have slowed uptake.

However, ISDN and standard 56Kbps (kilobits per second) analogue modems could also face a challenge from wireless technologies and satellite links. In the UK, Tele2, part of Millicom International Cellular, has launched a 386Kbps wireless service (to be increased to 2Mbps) which it claims is 80 per cent cheaper than leased lines, ISDN and BT's Highway service.

Like other broadband services, Tele2's service offers an "always on" connection, removing the need for dial-up. The company plans to reach 60 per cent of the population by 2003.

Satellite operators are also preparing consumer broadband services. A number offer direct services aimed at business users.

That will change with the launch of low earth orbit systems such as that planned by Teledesic to deliver "affordable, worldwide access to fibre-like telecommunications services such as broadband internet access, video-conferencing and interactive multimedia".

LEGAL ISSUES by Geoffrey Nairn

The search for online evidence

Today's laws were mostly framed for pre-internet conditions, but rapid changes are essential for e-commerce to flourish

Governments have traditionally taken the lead in calling for tighter regulation of the internet, but their calls are now being echoed by many users of the digital economy as the *laissez-faire* attitudes that traditionally prevailed start to backfire.

Today's laws mostly pre-date the internet and struggle to handle issues such as liability, intellectual property and taxation in cyberspace. A vivid demonstration of the problems that can arise occurred earlier this year in the Paris Court of Appeal, where internet libertarians confronted their nemesis in the unlikely shape of French model Estelle Hallyday.

She successfully sued a small French internet service provider for allowing nude pictures of her to be posted on one of the 47,000 web sites it hosted free of charge. The ISP, called *altern.org*, has now shut down all its hosted websites to avoid a repeat of the Hallyday case.

In a country where *liberté* is etched on every coin, the case provoked an uproar, not least because Ms Hallyday sued the ISP rather than the individual who had posted the pictures. The court decided that the ISP's role in hosting the incriminating web pages, albeit unknowingly, was equivalent to that of a commercial publisher and fined it accordingly.

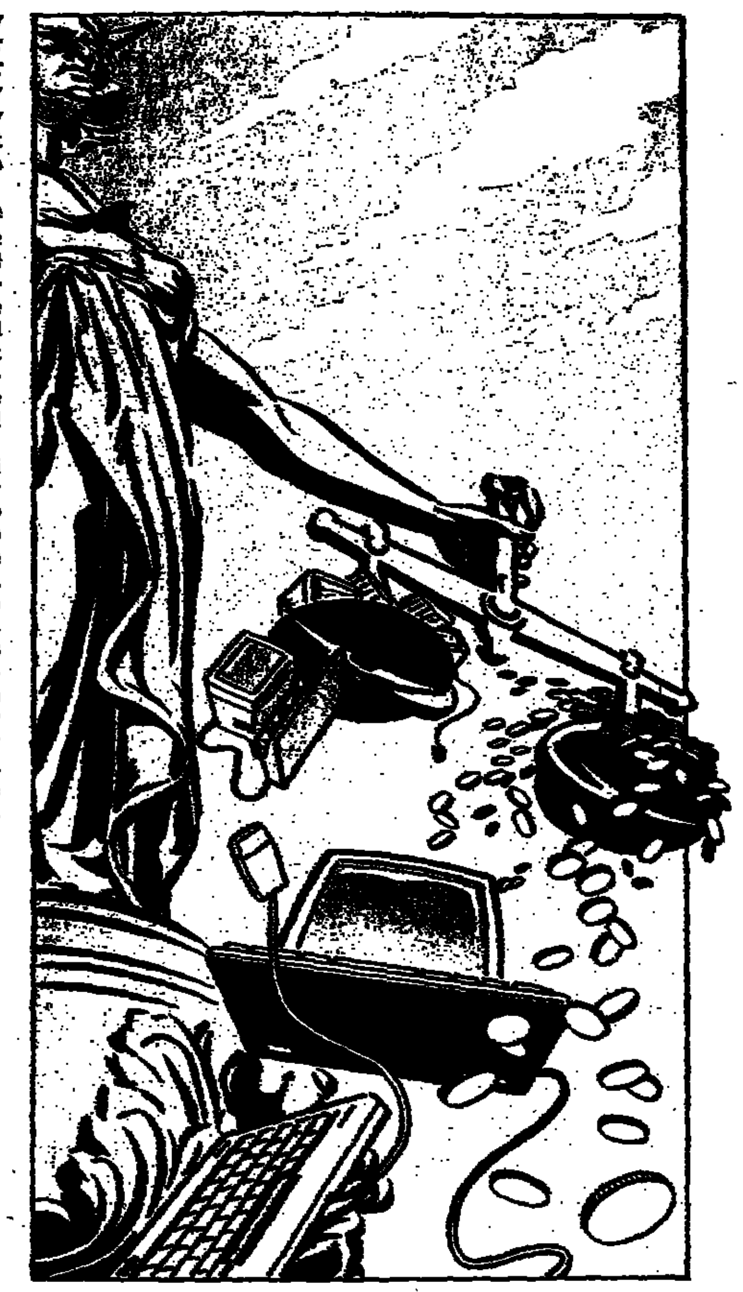
European moves

The Hallyday case was last month discussed by a European parliamentary committee considering a proposal for a European directive to clarify the legal issues surrounding e-commerce.

In its draft opinion document, the committee says: "[The case] shows the need for a harmonised and unambiguous regulation at the European level, and exemplifies the very negative consequences that may arise from a confusion between these new, specific businesses of the information society and their approximate traditional counterparts, like printer or publisher."

There is now a growing recognition that the *laissez-faire* policies that spurred the internet's early development have created a dangerous legal vacuum in cyberspace.

One of the most promising technical features of the internet for publishers – the transfer of digital files – is also one of the most threatening.



The computer age is creating a growing range of legal issues for IT users and suppliers – now there are fears that legislators may try to introduce unworkable laws that stifle the fledgling e-commerce industry Illustration by Mark Thomas

"Digital technology allows the production of consistently perfect copies, in potentially infinite numbers," says Peter Stevens, in a UK report on legal issues and the web, by Manches, the Oxford-based legal firm.

In Britain and US, copyright protection arises automatically on the creation of orginal work. However, in some countries copyright depends on registration, but the remedies available in an infringement action are often limited in the absence of registration, says the Manches report.

In the absence of specific legislation covering the internet, the temptation is to ignore the problem or apply existing laws with unpredictable and often contradictory results.

One area ripe with problems is intellectual property rights, which are notoriously difficult to enforce over the internet. The music industry is particularly worried by the proliferation of web sites distributing copyright music using the MP3 file format, which compresses audio files to manageable size.

European musicians recently petitioned the European Parliament to take action to protect their royalty streams from the MP3 pirates. Playboy Enterprises has been one of the most active companies in enforcing copyright on the internet. It has been to court in the US on several occasions to successfully prevent web sites from illegally using photographs of its famous centrefolds.

But victory in such cases is far from certain because of the difficulty in applying conventional laws to the virtual world of the internet. Forrester Research, the US consultancy company, believes Europe is at a serious disadvantage in this respect because of its hotchpotch of national laws.

Obstacles

"The EU must move fast to remove the obstacles presented by the current legal patchwork and create a more predictable environment for internet commerce," says Therese Torris, director of new media analysis in Forrester's European office.

In a recent Forrester survey, two-thirds of European business leaders surveyed felt that current EU regulation was ineffective or even detrimental to the development of e-commerce.

The EU has tried to foster a more favourable e-commerce environment with directives to bolster or harmonise national laws.

One example is the recent EU directive on digital signatures. By laying down minimum rules concerning security and liability, the directive aims to ensure electronic signatures are legally recognised throughout the EU. However, directives have to be translated into national law in each member state and this can be a slow process.

Forrester estimates that unless the obstacles can be removed quickly, Europe's internet economy could be reduced by as much as a third by 2003. The current situation of uncertainty is already causing problems, according to those working in Europe's fledgling e-commerce industry.

"Today, we are clearly at a disadvantage in Europe because in some countries there is strict legislation that creates bottlenecks to e-commerce," says Anthony Belpaire, chief executive of Globalsign, a Brussels-based company closely involved in digital signatures.

Nevertheless, Mr Belpaire takes some comfort from France's recent decision to relax its traditional strict stance on cryptography and the UK's moves to formulate a workable policy on digital signatures.

Globalsign hopes to create a pan-European network of certification authorities (CAs) that will issue digital certificates to consumers, traders and government agencies. These certificates could be used to sign and encrypt communications over the internet, including confidential e-mails, online purchases and dealings with government departments.

The European market for digital certificates could be worth $656m by 2001, according to Datamonitor, the research company, but Globalsign fears this market will not materialise unless urgent action is taken to address Europe's fragmented digital signature policy and issues such as "cross-certification" – the process whereby certificates issued in one country are automatically recognised by a CA of another country.

The legal issues surrounding digital signatures and e-commerce in general are complex and as the market is still very small – online sales account for less than 1 per cent of retail sales in the US – there is an obvious tendency to let *laissez-faire* attitudes prevail. There is also a powerful lobby, particularly vocal in the US, which worries that legislators might introduce unworkable laws that stifle the fledgling e-commerce industry.

One of the lobby's achievements has been a three-year moratorium on internet taxes in the US. Nevertheless, for the full potential of e-commerce to be realised, new legislation is clearly needed, both to address the problems that are now emerging and to create a climate of certainty that will encourage businesses to invest in the new digital economy.

PORTALS by Christopher Price

The view through the gateway

As online activity takes off, internet search engines are trying to entice web site visitors to stay longer and sample their services

When Globalvision.com, a small British multimedia group, paid a record $2m last month for three internet domain names, there was an air of inevitability about what it planned to do with its acquisitions.

London.com, England.com and Britain.com would be developed as the "portal sites for the best of Britain," according to Steve Potter, Globalvision.com's youthful president.

The UK group was just the latest to hit upon portals as the basis for its new internet venture. They have become the focal point of hundreds of internet business models, from online giants like Yahoo! to tiny British start-ups like Globalvision.com.

At first glance, it is not hard to see why. Internet search engine groups guide millions of internet users through the maze of the world wide web and initially made their first revenues from advertising and some channelling of "eyeballs" to paying sites.

However, it gradually dawned on them that if they could hold the users of their services as long as possible, they would be able to extract more revenues from advertisers, sponsors and electronic commerce vendors.

In part, this was a reaction to the emerging popularity of internet community sites, modelled on the success of America Online. By attracting visitors as members and offering them a myriad of services, from shopping and chat rooms to the ability to post their own web pages, the community sites have grown rapidly.

Over the past 18 months, the search engines have begun reinventing themselves as portals, or gateways, to the web – and set about designing their entry pages to keep, entertain and inform users as long as possible.

Viewers are encouraged to create their own home pages, courtesy of the search engine they are using, in order that the information they previously sought regularly now arrives on their screen without searching. All the big search engines have followed this concept: Excite with My Excite, for example, and Yahoo! with My Yahoo!

The search engine groups have also been vying for new services to put on their portals – financial news, sports news, financial services, e-commerce opportunities, weather and stock prices, to name just a few.

And as if to underline the community strategy, the big search engine groups have been acquiring community sites. The biggest deal, the $4.7bn acquisition of GeoCities, was struck by Yahoo! in January.

> 'The internet world moves fast. Today's fad is tomorrow's history'

It is a strategy which has paid off well for the new internet portals. Yahoo! reported net profits of $25m and earnings of 21 cents a share in the fourth quarter of 1998, up sharply on the $1.9m of profits and 2 cents per share earnings reported in the same quarter of last year. Revenues nearly tripled to $76.4m.

Meanwhile, the other big search engine groups have become acquisition targets. @Home, the internet service provider, paid $6.7bn for Excite, while Lycos is in merger talks with USA Networks. AOL's purchase of Netscape was in part driven by the attraction of its Netcenter portal.

Compaq is also seeking to cash in on the trend by listing the Alta Vista search engine/portal it acquired through the purchase of Digital Equipment.

However, some of these deals herald a threat for the existing portals and search engines. Deals such as those involving @Home and AOL reflect a move into the portal space by the internet service providers, and it is a trend which is also being seen elsewhere.

In the UK, for example, Freeserve, the ISP owned by Dixons, the retail group, has become the biggest in the country by virtue of its subscription-free offering. However, to pay for the service, Freeserve has turned itself into a portal as well, offering a multitude of e-commerce services, as well as advertising and sponsorship.

Other ISPs have been forced to follow suit. Virgin and British Telecommunications, two of the biggest ISPs in the UK market, recently announced not only the cancellation of subscription charges but also an expansion of their web services.

The fact that groups like BT are joining Excite and Yahoo! in expanding their content underlines the consolidation in the market and the finite amount of advertising and sponsorship in the internet market, analysts believe.

And while the portal market is being squeezed from underneath by the ISPs, the media companies and telecoms groups – anxious too not to miss out on a share of the emerging internet market – are swooping down from above.

However, as the market matures and users become more sophisticated, analysts believe that the portal market could fragment around different segments.

"This portal gold rush should be viewed as one step towards a wider evolution," says Gartner Group, the research house.

"The internet world moves fast: today's fad is tomorrow's ancient history. We project that the current attractiveness of such general interest portals as Yahoo! and Lycos will fade as the portal evolves towards more niche-interest portals."

These will aggregate content for specific communities of interest, Gartner believes, such as the medical profession, and stock traders. "By 2000, niche portals will replace portals as the most desirable piece of cyber real estate," it adds in a recent report.

This will be good news for those such as Globalvision.com. The company intends to use its three sites as portals offering links to sites that visitors to Britain would find useful, such as accomodation, gifts, excursions and car hire. It intends to offer potential partners, who have links from the sites, a revenue-sharing deal dependent on how much business the sites generate.

SECURITY by Mark Vernon

Concerns may be overdone

Companies need to tackle the security issue in a more systematic way

Is security over open networks such as the internet a problem or not? Experts disagree. A recent pan-European research report from KPMG Management Consulting cites security concerns as the number one barrier to electronic commerce: a quarter of respondents agree.

But Mark Johnson, a KPMG partner, believes that security is an over-hyped issue. "The tools for overcoming security risks are available but it remains subject to media hype". The media, for its part, might justify the hype as being a result of the confusion.

But perhaps one key to the puzzle is understanding that technology in itself will not secure open networks. Thus security breaches will continue to arise. Various surveys claim that over 50 per cent of companies have suffered in the last two years, with many not recognising the attack until long afterwards.

The trouble is that companies are taking the wrong or at least an inadequate approach to the issue. "A point solution like a firewall is not enough," says Geraint Evans, product marketing manager for UK network integrators Chernikeeff.

"The important point is to deploy a whole methodology in approaching security." Such a framework will account for every link of the electronic commerce chain, testing each one in isolation and then resolving weak points. Gartner Group, the research group believes that safe commerce-grade transactions can be performed on the web.

> Europe's Semper project aims for a secure system for electronic commerce

But it says that ensuring the integrity and privacy of such transactions is not an easy task, since it relies on making all aspects secure – from the user through to the back-end databases. Its report, *Secure Commerce via the Web*, argues that three choices face enterprises today: firstly, to invest in the technology and human resources to do the job safely; secondly, to refrain from making web-based transactions; and thirdly, to risk successful attack.

"We believe the first option is fast becoming the only viable solution," says the report. At a basic level, this first option need not be too daunting. User authentication via a password is of course a necessity but maybe passwords should also be changed every month.

Further, intuitive passwords that can easily be guessed by hackers might be prohibited. At a corporate level, a thorough-going policy on access from different locations is important. It is far easier to penetrate systems via dial-up connections than from local area networks in the office, for example.

"We are also seeing a growing interest in auditing tools, products that monitor traffic and spot anomalies," Chernikeeff's Mr Evans adds. "Those companies that are most advanced in their use of electronic commerce recognise this and so are likely to regard [security] as a less significant barrier than those that have not," states KPMG's Mr Johnson.

"For example, respondents whose companies had recorded sales via the internet were less likely to see security as a problem: and respondents in the UK, where companies are ahead in embracing electronic commerce, were the least concerned about security issues." But this is not to say that the security issue is receding. Indeed, some experts believe that the electronic commerce industry is only just beginning to grapple with the multiple challenges of providing security to open networks.

And that is not just media hype. One project in particular has been considered by ministers of the Group of 10 industrialised nations. The result is a project called Semper (secure electronic marketplace for Europe), which began in September 1995 and reported last December.

Semper is a collaborative effort. It embraces parties from the information technology industry, including IBM, the commercial sector – Germany's Commerzbank and Norway's SINTEF Telecom and Informatics are two recent additions – the academic community, such as the universities of Dortmund, Freiberg and Saarbrücken, and the European Commission, as part of its Advanced Communication Technologies and Services (ACTS).

The goal has been to devise the dominant, comprehensive solution for secure electronic commerce in Europe and then beyond. Michael Weidner of IBM's Zurich Research Laboratory identifies what makes Semper unique.

"It is the first project that aims at the complete picture of secure electronic commerce, not just specific pieces such as electronic payments, specific scenarios like online purchases, or specific products and protocols," he says.

This fundamental approach required a return to basics. So the framework includes legal as well as technical aspects. It recognises that an electronic marketplace is like a physical marketplace in that its main task is to bring potential buyers and sellers together.

But buyers or sellers might be dissatisfied with the exchange, which requires that in the virtual space, as in the traditional, exception handlers, dispute handlers and possibly an arbiter are on hand, too. In all these aspects, specific security requirements are necessary, guaranteeing integrity, confidentiality and availability.

Further for an open system, such as that demanded by electronic commerce, the framework should be easily configurable and extendable to a broad range of difference scenarios.

"Another objective which distinguishes Semper from other projects is the concept of 'multi-party' security," says Mr Weidner.

"Ideally, Semper users can ensure their own security with only minimal trust in other parties. This is primarily a question of protocols, not of service interfaces."

The trial has been welcomed by participants, even though the goals realised to date have been modest.

> 'The most urgent and open problem is the security of the user's computer'

Users who had already used public key technologies for online banking or the exchange of secure e-mail, saw the advantage of the Semper package in the fact that existing technologies are combined in one convenient tool which can be applied to the whole business process.

They also felt the software combining various existing technologies, that otherwise are difficult for the non-technical user to implement directly, would result in increased dissemination and use, thus offering fewer opportunities for abuse.

However, those behind Semper recognise its limitations. "The most urgent open problem is that of the security of the user's computer," says Mr Weidner. "At least one end of most electronic commerce transactions is handled by a PC with a standard operating system. Past experience has shown that these systems are notoriously insecure."

So far, this has posed no serious problems for electronic commerce, since there are even easier ways for criminals to defraud. However, this situation is likely to change. Although a battle has been won, the Semper team believes the war is far from over.

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WEB SITE QUALITY by George Black

Room for improvement

Many companies have far to go before their online offerings are worth viewing, with more commitment needed at the top

The web site has become one of the most important elements of an organisation's public image, yet many short-sighted groups still do not take a serious view of the web's potential. This is now a key management issue as the growth of electronic commerce accelerates.

In a few years, e-commerce is expected to make up around a quarter of all revenue for some of the participants. It could represent billions of dollars worth of trade in the next four or five years, according to various forecasts.

To neglect the medium through which this revenue is likely to flow would seem to be an extraordinary omission. A number of companies – notably in the US – have realised this and worked hard on their web sites.

Among them are online bookseller Amazon.com, whose success has dazzled the retailing world, Dell, the direct marketer of personal computers, Lufthansa, the German airline, and eBay, the internet auctioneer.

But there are many companies which still have far to go. A report earlier this year by Interactive Media in Retail Group (IMRG), the electronic commerce development group, concluded that some of the top 100 UK businesses had very poor web sites. Eleven of them even had no site that could be accessed.

Only three – British Telecom, Tesco, the supermarket chain, and Alliance and Leicester, the banking group – were given the highest rating of five stars, meaning that their site was "excellent, well-thought-out, great-looking, with lots of useful features and good customer support."

Two sites were classified as one star: "absolutely awful - don't waste your time!" Safeway, the supermarket chain, was said to have only a single page site, which related to recruitment, with nothing on its stores' locations or opening hours, nothing on products or special promotions and no corporate information.

Steve Johnston, a manager at IMRG, said that there had been some improvement since its report last year, with the number of companies meriting four stars ("very good, but just falling short in some areas") increasing from 29 to 37.

But overall, the results were disappointing. "A lot were quite boring and most still have a long way to go before they get it right. Small firms often do it a lot better than big ones," he remarked.

Mike Thompson, research manager at the Butler Group consultancy, agreed. "It is a major concern that large organisations do not appreciate the possibilities of e-commerce and have web sites which are just another advertising medium.

"This is completely inadequate. They do not give their prospective customers anything like the same experience as real-world shopping. They spend a fortune on laying out their stores, but do not seem to put much thought into laying out their web sites.

"Smaller companies often do it better because they realise the need to leverage all possibilities. Large ones just think their customers are sure to keep coming back to them."

He cited England's Newcastle United football club, which he said took the shopper straight to the till after buying a shirt – without offering him the chance to buy anything else, except by going around the whole store again.

A leading travel agency, which claimed to have around 5,000 holidays, only offered around 20 online. "Even on the best sites, online shopping is not generally a pleasurable experience," he said.

UK companies could lose business to overseas competitors, especially from the US, which put more effort into their web sites. "It might not be worth driving a long way to go to another store. But online, it is very easy to click on to a different web site. People will go wherever they get the best service."

The web site quality and performance of a company depends largely on the level of commitment of the chief executive and top managers. In the past couple of years, senior managers have had a lot of other issues to worry about – the year 2000 date change and the arrival of the euro, for example – and may have put the web site to the back of the queue.

Both Mr Johnston and Mr Thompson said the key to creating a good web site was to make it simple to navigate around a large volume of information. Most important was to meet the expectations of the online customer, whether for home delivery or any online quotation.

"The trouble is that expectations seem to be running way ahead of corporate strategy, said Mr Johnston. He often came across "lonely e-commerce evangelists" in traditional businesses, begging for money with which to set up or develop a web site.

Managers had to invest in e-commerce for the long term and reckon to spend at several hundred thousand pounds to create and maintain an effective web site. However, compared to the potential long-term return on investment, that cost could be considered fairly low.

Almost all organisations will need to buy in the skills to develop a web site and those skills are scarce. "There are plenty of people who will give you some fancy graphics that eat up bandwidth, but few seem to understand the importance of making it easy to use," said Mr Thompson.

Martin Chilcott, chairman of Clarity, the online business development consultancy, said that a year ago, companies were hoping to build a web site for under £40,000 ($65,000); but £100,000 was the minimum investment now for a good small web site. Clarity recently helped Carphone Warehouse set up a site for an initial expenditure of around £500,000.

Online shopping in the US: in Maryland, Marguerite Smalls shops at Spiegel via the internet AP

MAINTAINING A WEB SITE by Joia Shillingford

The cost of creating a strong online identity

Companies can choose to spend modest sums on their internet presence or invest heavily for a wide range of features

The cost of building and maintaining web sites varies enormously, from the small self-built site to the global electronic commerce hub.

According to UUNET, the internet service provider owned by MCI WorldCom of the US, £10,000 ($16,000) buys an entry-level web site, £10,000-£50,000 a medium site and £50,000-plus a major site.

"However, the cost also varies by type of site," says Mark Desvaux of UUNET, who works with a range of partner web companies. Sites can be made up of different elements:

- □ "Brochureware" – transferring the company brochure online
- □ Interactive – a site which uses web technology to create a dynamic experience for the user
- □ Database-driven - collation and delivery of information
- □ Multimedia – high level presentation using creative audio-visual technologies such as Flash and Shockwave
- □ Streaming media – the delivery of audio, video and newsfeeds on a web site.

"As there is such a diverse range of options available," says Mr Desvaux, "it is very difficult to pigeon-hole sites. Web companies will, therefore, very rarely offer a packaged product." If they do, "such sites are likely to be very basic."

"In terms of maintenance, companies have various options based on the number of days per week, month or year the site needs to be updated," adds Mr Desvaux.

"As a rough idea, a site costing £50,000 to design and build will probably require two days a week maintenance," he says. "The total maintenance cost, assuming £600 per day, is then over £60,000 a year.

"But web technology is becoming very clever," believes Mr Desvaux, "and investing in a £50,000 database-driven system or an automated newsfeed can actually repay itself within six months if the alternative is hiring an HTML (hypertext markup language) programmer to update the site manually."

Companies setting up web sites may also have to devote a number of internal staff to making sure their web site is up-to-date, adding new services and promoting the site.

Omniscience, web designer to Virgin Books, V2 Music (part of Virgin) and Subaru, the Japanese car company, believe that if enough business sense is applied to the design of a site, then no further maintenance will be needed from the design consultants.

Time-Warner of the US found its internet costs heavy when it first ventured online. But at their best, web sites can make a substantial contribution.

For Dell, the US personal computer company, revenues from the world wide web have now reached $10m. Yet its internet-based resources mean that its costs are similar, whether it accepts orders for 10 or 10,000 systems.

Nor did the company have to re-engineer its manufacturing processes very much to exploit the web – the infrastructure was in place, being implicit in the direct business model.

It has also built 180 customised web pages for business customers in the UK. These Premier Pages offer a raft of benefits for the introduction of operational efficiencies at customer sites.

At Regus, the business centre operator, a web site has cut the cost of marketing and recruitment. Regus has a budget of £200,000 for its web site, which it is using to support rapid expansion. It has an international web site, with a further six versions in Finnish, Danish, Japanese, Norwegian, German and French. Hong Kong and south-east Asian web sites are in the pipeline.

The internet helps Regus to solve a number of problems related to marketing new centres, which it is opening at the rate of one every three days.

For example, the UK-based company can produce online marketing literature for overseas centres far more quickly than if it had to print this and post it from the UK. That means the marketing of a centre can start around three months earlier.

The Regus web site also generates enquiries. During the site's first year, it generated over £5m worth of business, making a four-fold return on investment – twice as high as any of its off-line marketing activities. And the cost of each enquiry is 50p, almost half that of traditional methods.

However, the company believes the biggest savings will come from using the internet to recruit. Already, Regus has saved £35,000 by using the internet to recruit 10 people.

The appointments filled were middle to senior managers in Greece, Poland and the US – typically very hard markets to recruit for. This year, 2,000 new staff will be needed worldwide and many will also be in countries which are hard to recruit in, such as Peru, Columbia and Slovenia.

Web sites can, of course, be built very cheaply. For example, web authoring software package HotMetal Pro from SoftQuad is claimed to be as easy to use as Microsoft Word or Excel and costs £99. The company says it can be used by anyone from complete novices to semi-professional designers.

British Telecom, which has an e-mail service, also offers approximately 10 web site packages, ranging from simple sites ready within hours to tailor-made sites for large companies. Costs range from a cheap solutions for small- to medium-sized enterprises at a few hundred pounds to more expensive managed dedicated server packages costing thousands of pounds a year.

Dharmesh Mistry, director of engineering at Entranet, the UK web designer and strategist, says a company should allow from £10 to £1,000 a month to meet the cost of hosting its web site. Sometimes, hosting will even be provided free.

But Entranet, which designed the Eagle Star Direct insurance site, warns that companies should expect costs at the top of the range if they want service level guarantees and 24-hour monitoring.

CASE STUDY
INTEL

Online move beats e-commerce target

Intel has been a strong supporter of e-commerce, recognising that the move to online sales will boost sales of Intel-based servers and personal computers.

But it was not until July of last year that the US company set up its own e-commerce operations. It launched an extranet last July to communicate more effectively with its clients. Its largest customers already use EDI (electronic data interchange) systems to place their chip and other product orders online.

Intel's goal with its extranet was to improve communications with its small- to medium-sized customers who cannot afford to set up similar EDI connections.

The extranet, called the E-Business Program, had a goal of making it easier for customers to place orders for chips, motherboards, chip sets, flash memory and other products. Intel was currently handling such requests through faxed orders and telephone orders.

Streamlining this business process through standard internet technologies such as web browsers was the key goal for Intel. Instead of having to install a complex EDI system, customers using Intel's extranet need no special software and can easily place their orders online and download related information.

Late last year, Intel said that this extranet had more than achieved its goals and had exceeded more than $1bn in sales in only its first month of operations, beating its own estimates of how much business it could handle and representing one of the most successful e-commerce ventures to date. With such a high monthly sales level, Intel quickly surpassed the e-commerce ventures of other well-publicised examples from Dell Computer, Cisco Systems and other companies. Dell, for example, handles about $300m a month in online business, while Cisco has about $400m a month in orders.

Intel says that it decided to make a big splash in e-commerce rather than starting off small and building the site out to attract larger numbers of customers. By starting off with a large goal in mind, Intel says it could quickly bring in customers rather than just offer a small number of online services.

Pentium III: Jami Dover, Intel's vice-president of world marketing operations, with the company's powerful new processor AP

The Intel extranet also has other key benefits that save the company much time and money. The extranet features information on Intel products and offers online support services rather than relying on more expensive and traditional methods of supporting customers. There is also an order-tracking service allowing customers to look up the status of their order easily without having to call a customer representative.

Intel says that before setting up its extranet, it was handling about 45,000 faxes per month from customers based in Taiwan alone; eliminating these faxes has freed up its staff to work on other customer support issues. Although there were some fears that Intel would be competing with large distributors that sell Intel products to smaller businesses, there has so far been little conflict.

Paul Otellini, senior vice president at Intel, recently told financial analysts that the company was surprised at the success of its e-commerce operations. Compared with its original goal of handling $1bn in online sales per quarter, he said that Intel should easily exceed $2.5bn per quarter.

Intel's e-commerce efforts illustrate the success of a business-to-business e-commerce venture. This is a form of e-business which ties in suppliers and customers more tightly than before and introduces business efficiencies that benefit both Intel and its customers.

Intel says that it is investigating ways of introducing additional e-commerce initiatives and it may also set up an extranet to help its largest customers improve the delivery of Intel parts to PC production lines.

Tom Foremski

CASE STUDY
INTERWORLD

Spreading the digital message

In the heady world of electronic commerce – still in its infancy, but growing at a startling pace – much of the emphasis has been on headline-grabbing consumer activities.

But the real test of its effectiveness for companies is the extent to which it helps transform their operations to fit them for the digital age. While some companies have taken an aggressive line on the adoption of information technology, many remain half-hearted and unsure.

This hesitancy has been reinforced by the huge task of ensuring that IT systems are not undone by the year 2000 date problem. But those in the forefront of the electronic business wave are convinced that Y2K will only be a temporary obstacle.

"E-commerce is the most important strategic business initiative [this year] after Y2K," asserts Michael Donahue, co-founder and chairman of InterWorld, a US provider of software for internet commerce. "But after the [year 2000] fire-fighting, it is time for e-commerce," he adds. "The business world is increasingly about the continual improvement and optimisation of business processes."

Along with other e-commerce specialists, InterWorld is a young company, having been formed in 1995. But its products, concentrated on the selling side of online commerce, have given it a growing market position. It offers clients "out-of-the-box" packages to meet software needs in the areas of sales, order management, account management and order execution.

In a move showing the importance of alliances and partnerships in the IT-driven business arena, InterWorld has just linked up with Cisco, the leading network equipment supplier. Cisco is keen to bring its own online business model – which has generated big cost-savings and sales revenues – to the outside market.

"People are keen to learn what we've done," says Wim Elfrink, Cisco's vice president for consumer advocacy in Europe, the Middle East and Africa. In Europe, e-commerce is still mainly associated with getting a catalogue online in the minds of many companies, he feels. "But e-commerce means going right through your business processes."

Michael Donahue, co-founder and chairman of InterWorld, says that after the year 2000 fire-fighting, 'it is time for e-commerce'

He expects "an explosive boom in e-commerce deployment as of next year". Along the way, "a lot of money will be spent".

To spread its message, Cisco, which has taken a small stake in InterWorld, is also working with leading consultants and other e-commerce specialists. Its internet evangelism is clearly linked to the prospect of more sales. Even so, the truly online economy that Cisco and others have in view is still some way off. "But the promise of the Internet is the global digital economy," states Mr Donahue.

InterWorld, privately-owned but planning a stock market listing, took a thorough approach to e-commerce, concentrating first on research and development before moving to marketing and sales. Today, it has some 80 customers – including NCR, Cendant, GeoCities and Toys R Us – and has moved beyond north America to Europe, Japan and Australia.

"We've been very focused and pragmatic," Mr Donahue says. So that its products can be fitted to customers' needs, InterWorld's Process-Centric computing approach allows them to create applications modelled on their own business processes. These can be linked to customers' enterprise resource planning, customer relationship and other systems.

A big challenge for suppliers of e-commerce services and equipment is scalability, so that solutions can be expanded in line with growing demand. This is where partnerships with other companies are vital. "You need a solution that evolves with you, weekly and monthly," says Mr Donahue.

Andrew Fisher

MOBILE INTERNET ACCESS by Joia Shillingford

E-mail solutions wherever you are

As e-commerce evolves, telecoms companies believe that executives away on business will increasingly look for ways to access the internet

Mobile access to the internet accounts for only a small proportion of mobile phone traffic. But companies such as Ericsson are betting it will be the "killer application" in the new world of high speed mobile communications.

Below, we look at a number of "log-on and go" strategies from the "luggage-free" to the "full-on backache" approach:

'No-luggage' options

One of the most portable strategies for receiving e-mail "on the go" is to ask your contacts to e-mail messages to a web-based mailbox service, such as Microsoft's Hotmail, as well as to your normal one.

This means that when you are away on business, you can use any computer connected to the internet's world wide web to check your mail. This could be a PC in an office you are visiting, an internet cafe, or the hotel's business centre. The beauty of this arrangement is that you do not need to carry a laptop computer.

The downside is that you may have to pay quite a lot to use the hotel's PC and you may not know where the nearest internet cafe is or feel like going there at the end of a long day. Your contacts may also forget to copy your messages to your second mailbox (though you could switch over to a web-based e-mail service altogether).

Another option is to use a mobility service such as Breathe Contact, launched at the end of March by Breathe, a subsidiary of UK-based Martin Dawes.

This service can consolidate all your voicemails, faxes and e-mails into a single box and read out your e-mails to you automatically when you are out and about. Breathe Contact will work with any fixed phone, mobile or electronic mail service.

Alternatively, if you have a Breathe mailbox you can set up it up so that you can check your messages on the web. Prices in the UK for Breathe Contact are likely to be around £3.50 a month.

Breathe also offers a free e-mail service, where – as with Dixon's Freeserve – you pay for telephone support. Before long, you may even be able to surf the internet using the voice equivalent of an internet web browser from Lucent, AT&T or Motorola.

The three US companies have come together to form the Voice eXtensible Markup Language (VXML) Forum. With the backing of 17 other companies, they plan to draw up a standard. VXML, for using the human voice to browse the net.

A draft specification should be available by the end of this year. The idea behind VXML is that users should be able to use conversation to interact with the internet and call up audio files of information on, say, train timetables or weather information.

'Not much luggage' options

Another strategy for connecting to the net on the move is to use a Nokia Communicator, an integrated phone and personal organiser.

This product did not do so well when first launched because it was rather large for a mobile phone. But the company has shrunk it down to a much more feasible size. The new Communicator can be used just as a phone, just as an organiser or to check e-mails.

You can browse the internet, too, but data access speeds will be faster when the General Packet Radio Services standard enters commercial use. However, Bridget Blow, chief executive of ITNet, the UK outsourcing company, became a fan with the first model and uses it to check e-mails when away on business.

There should soon be far more portable devices around that either have communications built in or are easy to connect to a mobile. This is because Symbian, a company owned by Psion, the UK-based personal organiser company, and mobile phone makers Ericsson, Nokia and Motorola, has adapted Psion's Epoc operating system for mobile devices.

The first Epoc-based device for the executive who must access the internet is Ericsson's MC 218, which stands for Mobile Companion. This "companion" is supplied with an infrared modem and can be used with any Ericsson mobile for electronic mail and fax.

The company says its mobile companion is "part of a divided smart-phone concept." It advises: "On a business trip, bring the phone and the MC 218, to a meeting bring the MC 218, walking the dog, bring the phone."

According to Ericsson, the Epoc operating system is fast to operate and consumes less power than others. The mobile device also works with WAP, the wireless access protocol defined by US company Unwired Planet for looking at the internet from a small screen.

WAP also defines how information should be displayed on the internet if it is to be viewed from a small device. Many mobile phone makers are supporting it.

So, if you want to surf the internet from a phone alone, look for a largish liquid crystal display and support for WAP. Or if you want net connection at the touch of the button, French telecoms equipment maker Alcatel plans to launch its WebTouch touch-screen mobile at the end of summer.

If you do not yet need to connect to the net wherever you are, wait a while. Options for the mobile executive who does not want to carry much luggage should increase when third generation mobile networks with higher data speeds start to appear.

'Backache special'

The "not much luggage" options are fine if you just plan to exchange short e-mail messages or look for internet information that is easy to view on a small device.

But if you have to type up a long report or a memo of more than a few hundred words, typing on the keyboard of a personal organiser is not a lot of fun. That leaves the "no-luggage" option of using a business centre or internet cafe.

However, if you want to do lengthy work on a plane, you will still need a portable computer and, ideally, a mobile phone and data card (for e-mail) or an infrared mobile. On top of that, you may well be carrying a personal organiser full of phone numbers plus a few spare batteries for the portable. And an AC adaptor for recharging them.

That is the bad news. The good news is that portable computers are becoming lighter (for example, the Sony Vaio and the Toshiba Libretto) and that for many jobs, an organiser-sized device will do. It all adds up to better news for backs, everywhere.

NEW COMPETITION: Financial Times International Business Web Site of the Year

Enter now for the 1999 awards

An opportunity for companies to win prestigious awards for international business web sites

After the success of last year's competition, it is now time to start registering your entries for the 1999 Financial Times International Business Web Site Awards.

An expanded competition will again be sponsored by UUNET, which will be joined this year by PricewaterhouseCoopers, one of the world's leading management consultants.

These increasingly prestigious awards were launched two years ago to recognise companies in various market sectors that have used the power of the internet to achieve significant commercial advantage. But with the increasing importance of the internet to business, the time was right to introduce a new and more incisive element by inviting PricewaterhouseCoopers management consultants to jointly sponsor the event.

This year, the awards have been improved to highlight the continued growth in e-business and web activity internationally.

UUNET, an MCI WorldCom company and a global leader in internet communications, continues its commitment to the competition by sponsoring the event for a third successive year.

"Over the past two years, we have seen the standard and number of entries increase dramatically.

"This year, we anticipate an even higher standard as the nature and benefits of e-business become more fully understood by businesses in all sectors of industry," says Joe Clift, UUNET's UK marketing director. "We are also delighted to welcome PricewaterhouseCoopers who will bring a new dimension to what we believe will become the leading business internet award scheme internationally."

Patrick King, partner at PricewaterhouseCoopers

UUNET
An MCI WorldCom Company

PRICEWATERHOUSECOOPERS

Management Consulting Services, comments: "Businesses must realise that globally, we are about to under go massive and disruptive change.

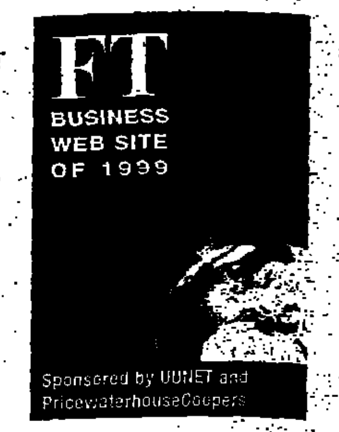
"And yet what continues to surprise us at PricewaterhouseCoopers is that if you draw a conclusion from the levels of e-business activity across Europe, you would have to infer that nobody has seen this change coming.

"This is crazy – it is like expecting red flags in front of oncoming cars.

"Although the 'e' prefix in e-business will dissolve – after all it's just IT and the value chain – the transition will completely reshape the business landscape.

"PricewaterhouseCoopers want to encourage individuals and organisations to embrace change and stay ahead of their competition.

"We are delighted to be part of the FT's International Web Awards because it gives us the opportunity to highlight and commend the achievers, as well as to encourage others to follow in the path of the few."



Categories

The 1999 Financial Times International Business Website of the Year awards will be presented to winners in each of the following five categories:

☐ Best Large Organisation (excluding financial sector): *The 1998 winner was Dell Europe.*

☐ Best Financial Services Site: *The 1998 joint winners – GNI Ltd and the Co-Operative Bank.*

☐ Best Public Sector Site: *Last year's winner was BBC News Online.*

☐ Best Small-To-Medium Enterprise Site: *The 1998 winner was PhotoDisc Europe.*

☐ This year, we are introducing a new category: Business Web Site of the Decade – which will be voted for by FT readers.

How to enter

Entries will close in July. Details of how to enter can be found by visiting the web site: *www.businesswebawards.com* or via the FT.com web site: *www.ft.com/hippocampus/q9ea22.htm*

PRESSURES ON THE INTERNET by Mark Vernon

Can the technology cope?

Within six years, there may be 300m people online, but the internet is only as fast as the weakest part of the network

Traffic on the internet is soaring, but will the technology be able to keep up? What demands will the online explosion make on the chips and cables, servers and switches that carry this voluminous traffic?

According to Datamonitor, the research company, the global online population is set to exceed 250m in 2002 and 300m in 2005. The steepest growth is expected in the previously under-developed markets of Asia and South America.

Datamonitor – in its report, *The Future of the Internet* – also predicts a sharp rise in the volume of traffic attributable to video- and audio-intensive applications, which means there will be a growing need for bandwidth expansion. These applications now account for 2 per cent of internet traffic and by 2003 will account for 6 per cent.

With demands on the internet set to strain capacity further, the obvious response is to boost computer processing and data transmitting power. But the problem can actually be tackled in a rather more sophisticated way.

For any individual user, the internet is only as fast and effective as the weakest link in the chain. Particularly for dial-up, small business and domestic users, this weak link is likely to be located in the section of the network that carries traffic the last half-mile to the desktop, the so-called local loop.

Much development work is being done on bridging the gap between ISDN (integrated services digital network) and the much faster T-1 connections, the former being about the fastest option before the massive leap to the bandwidth of the latter. "However, [alternative] services are unlikely to be fully deployed for around two years, meaning that there will still be a lack of bandwidth for these companies in the foreseeable future," says Datamonitor's Phil Codling.

"The ultimate aim of service providers is Fibre To The Home, but it is accepted that this is many years away. Estimates range from 15 to 30." Fibre inherently contains around 100 times the capacity of coaxial cable. Coaxial cable networks inherently contain around 1,000 times the bandwidth of copper pairs, the link that dominates the local loop now.

But this is not to say that local loop speeds are not improving rapidly. ADSL (asymmetric digital subscriber line) and cable modems will provide the next leap in service at this end of the market. "ADSL and VDSL (very high-data-rate DSL) together allow carriers to move to a fibre architecture through ever-shortening copper pairs, with the data speed being adjusted for local conditions," says Mr Codling.

In part because of this delay, software tools that optimise the hardware's efforts and provide an alternative to relentless upgrades are rapidly gaining ground. The deeper argument in favour of this approach is that the internet's performance is a more subtle issue than just a question of the size of the backbone, whether this is under the Atlantic or at the end of the street.

Reverse Proxy Caching is one intelligent technology used to ease pressures on the internet. Local servers are used to store web content that is either frequently requested or stays comparatively static over time. "Approximately 80 per cent of the internet is like this," says Eugene Forrester, regional product manager for Novell, the US networking software group.

"Caching offloads the demand from the web server as well as working much more efficiently, since the streaming of information can be performed ahead of an enquiry being made."

'The internet's wild nature brings big problems for 'voice packets''

Additional gains can be made not only by redistributing the flow of traffic across the network, but also by breaking the flow down according to different types of data and then handling each more appropriately. Consider, for example, what happens when voice is transmitted alongside data in web-based call centre services.

The chaotic nature of the internet that arises from packets of data being sent independently creates great problems for voice packets that have to arrive more or less simultaneously at their destination. To avoid delays, voice must be given priority, but this reduces the overall speed, since it means that packets must be physically inspected.

"A trade-off can be managed by introducing flow sensitivity," says Todd Krautkremer, vice president for marketing at Packeteer, the US bandwidth management company. "At the centre of the network, speed is all important. So our technology inspects packets at the edge and attaches a signature to them, allowing transmission rates to be varied without having to look at every packet, every time."

This technology is called Stateful Inspection and is also deployed by Cisco, the US network equipment group, in its PIX Firewall. Again, instead of every packet being inspected as it moves through the firewall, data is classified in advance by a proxy server.

Virtual Private Networks pose a similar problem. VPNs are, in essence, a means for parties to speak privately to one another across otherwise open networks. The facility is delivered by hardware that opens up tunnels across the public highway through which secure data travels.

"There are various ways of doing this, but it makes intense demands on traditional routers, since data must be encrypted and then interpreted, compressed and then decompressed," explains Colin Gibbs, systems engineer manager with Nortel's Bay Networks.

However, a distributed switch architecture, which spreads the load for encryption and compression functions across a number of processors, means that the traditional routers – of which the bulk of the internet is currently comprised – can be blind to the demands of VPNs.

"Doing this will be a problem for a while on the internet, since ISPs and their networks do not necessarily support distributed architectures," says Mr Gibbs.

"We advise customers to ask about it and ensure that encryption and compression can be adequately handled. Otherwise, it can cause severe problems."

The death of bandwidth, when infinite connectivity becomes a commodity rather than a luxury, is predicted by some experts to be only a few years away.

For many internet users, however, they could be rather long years. Intelligent technology, offering alternatives to the crude demand for more hardware power, will make the waiting period more bearable.

SMART CARDS ON THE INTERNET by Rod Newing

High potential, big delays

Smart cards could offer security in online payments, but by the time they are ready for use, they may not be needed

In the anonymous world of the internet, smart cards offer a means of authenticating that you are who you claim to be. A smart card is like a payment card, but contains an embedded tamper-proof computer processor.

This allows it to carry out complex encryption calculations and to hold data – such as digital certificates – securely. These can only be obtained from a trusted third party organisation to whom the holder is known.

A smart card brings authentication and portability to electronic mail, electronic commerce, electronic cash, banking, subscription-based information services, dealings with governments, electronic tickets and reservations, stock purchasing and other activities.

"As well as lacking authentication, internet security is weak because encryption keys are stored on a PC and controlled by insecure browsers," says Nick Habgood, chief executive of Maosco, an industry-wide consortium that controls the Multos multi-application operating system.

"There is also no proof of the transaction in the event of a dispute. A smart card provides a tiny secure area to store encryption keys that can be physically removed from the PC. The most important challenge isn't cryptography, but secure key management."

The smart card itself is currently protected by a personal identification number (PIN), but in future it may be protected by a biometric measure, such as fingerprint identification. The smart card can be inserted into the PC, using a terminal attached to the back or to the keyboard. The latter is a more secure solution, as the keyboard can be isolated from the computer while the PIN is keyed in.

GemSafe from Gemplus is an example of the sort of product available. For $99, a user can purchase a multos smart card with a downloadable Verisign digital certificate and a terminal. This provides authentication for web site access and electronic commerce in conjunction with secure sockets layer (SSL), the internet encryption standard. It will also provide secure electronic mail if both parties support the product.

Corporate versions are aimed at business-to-business transactions and can be combined with network access controls, which will become increasingly important with the introduction of Windows 2000, the next version of Microsoft's major operating system. The US company has recently announced Smart Card for Windows, an operating system for smart cards, with the vision "to place a smart card in every pocket that enables the cardholder to have secure access to online resources".

Mondex International, the MasterCard subsidiary, has just launched a Multos multi-functional smart card that carries ActivCard, a product similar to GemSafe. This allows banks to issue smart cards that provide debit and credit payments combined with Mondex electronic cash and secure authentication for personal banking and other transactions.

'The internet won't wait for smart card solutions'

"It completes in a single card the set of services required to do business online over all networks," says Lloyd Daniels, senior manager for new products at Mondex.

Smart payment cards are already in issue in Belgium, France, Germany and The Netherlands, and the UK has just started issuing them. "Once they are in widespread use, everyone will carry proof that a card is genuine and of the correct identity of the buyer," says Carolan Mearns, author of *The Smart Card.*

"This ability to provide digital signatures through the card has the potential to transform internet trading by making it possible to carry out secure internet trading from the home, office, hotel room, kiosk in a shopping mall or from mobile telephones. However, smart payment cards are not in widespread issue, particularly not in the United States, where internet usage is greatest."

Smart cards are being harnessed to provide electronic cash in the physical world and offer the potential to make "micropayments" over the internet. More importantly, the internet offers an obvious channel for downloading cash from a bank account to the card to be spent physically.

"Smart cards are a technology with a lot of promise on the internet, but there are a lot of obstacles to deployment," says Gary Eichorn, chief executive officer of Open Market, the electronic commerce software provider. "One of these is the ability to have access to cheap and easy readers on the desktop for the consumer, as well as the infrastructure required on the server."

Wells Fargo, the world's largest internet bank, has recently conducted a seven month trial for 100 employees to use a smart card over the internet. It authenticates them to transfer money between their checking, savings and money market accounts and to transfer funds to the card as Mondex electronic cash. This can be spent on the internet with three merchants or used physically in the staff canteen and nearby shops.

"The objective was to test the technology," says Clark Weber, electronic commerce product manager at Gemplus who was involved with the trial. "There are network issues to address, as transferring cash to the card takes 25-30 seconds. People's toleration level to delay is about 15 seconds maximum."

The widespread use of electronic commerce, internet banking, online share trading without smart cards is ominous. It will be especially difficult to suggest to people that their current transactions need more security without frightening them off-line completely.

"The internet won't wait for smart cards and will solve its own problems," says George Wallner, chairman and chief technologist at Hypercom, the data equipment manufacturer. "We sell a lot of electronic commerce software and authentication is not our customers' concern, but making a sale. Everybody understands that payment security is a weakness, but by the time smart cards become useful for the internet, it won't want them!"

Insurance web sites mushroom in the US

For the insurance industry, a big advantage of selling via the internet is that the client does the work and pays the connection costs, writes **Geoffrey Nairn**

Insurance has long been the sleeping giant of the financial services industry and innovators must contend with the weight of tradition and the complexity of insurance regulations.

But the sector's conservatism is starting to crumble as more insurers discover the advantages of direct selling via the internet. The US has led the way in selling insurance online.

US insurers have the advantage of high internet penetration and a large homogeneous market that allows products to be marketed nationwide.

In Europe, by contrast, insurers must contend with lower internet usage and a patchwork of national rules and customs.

A single European market for insurers has supposedly existed since 1994, when a unified system for their authorisation and financial supervision came into effect. But the European Commission admits that significant obstacles remain to the marketing of insurance across borders.

Where liberalisation has had most effect is in national markets which previously had strict controls over insurance policies and tariffs. One such market is Italy, where car owners once had little reason to shop around for obligatory third-party cover as all insurers charged the same tariffs, fixed by the government.

In 1995, this market was deregulated and Italy's insurance companies were free to set their own prices. RAS, a leading Italian insurer owned by Germany's Allianz, responded to this challenge by creating a low-cost direct sales operation, Lloyd 1885, to sell motor insurance policies over the telephone.

In the direct insurance market, providers compete almost exclusively on price and so Lloyd 1885 offers a limited range of low-cost policies suited to quick selling over the phone. All calls are handled by a call centre in Milan, with an information technology infrastructure developed by Andersen Consulting.

The unit has sold around 30,000 policies over the phone. In 1997, RAS decided to extend the Lloyd 1885 direct sales operation to cyberspace. It asked Andersen to build a site that could deliver quotations in real-time and allow customers to complete their application online, including processing credit card payments.

This new site, called GenialLloyd, is linked directly to the quotation engine used by the call centre operators. The complete system, based on Microsoft technology, cost around L2bn ($1.1m) and went live in September 1998. In its first month, it made 14,000 quotations.

"The response was beyond our wildest dreams," says Giorgo Di Paolo, head of the Milan-based insurance unit of Andersen Consulting. Only 170 policies were sold in the first month, but this has risen to 1,700 in early 1999. According to the insurance company, 10 per cent of its policies are now sold over the internet and the value of these policies is relatively higher as internet customers tend to buy higher-premium products than those who call by phone.

"The infinite patience of the web server is better suited to selling complex products than the call centre operators," says Mr Di Paolo. To entice Italians to spend up to 20 minutes filling in the online forms – Italian bureaucracy makes no concession for net surfers – Lloyd 1885 offers discounts of up to 15 per cent over the rates it offers by phone.

"The great advantage of selling via the internet is that it is the client who does the work and pays the connection costs," says Mr Di Paolo. If it sells the same policy over the phone, Lloyd 1885 must pay a call centre operator to answer the call and also pay for the freephone number that the customer calls.

Motor insurance is the classic "grudge" purchase and most customers renew their policies automatically because it is too much hassle to shop around, even though they suspect they could get a better deal elsewhere. There is thus considerable interest in using the internet to make it simple to obtain comparative quotes from different companies.

Forrester Research, the US market research company, says nearly half of online consumers will research motor insurance on the internet and over a quarter are willing to buy policies this way. InsWeb, a Californian company, was a pioneer in providing comparative quotes online and its web site today offers products from 28 insurers, covering the term life, home, health and motor insurance sectors.

The number of customers using InsWeb grew from 660,000 in 1997 to 3m in 1998, according to Darrell Ticehurst, the company's president.

"Our research shows that consumers are starting to feel comfortable buying insurance over the internet and while price is certainly a major element, the most important factor is the internet's convenience," he says.

InsWeb acts as an electronic marketplace, aggregating real-time quotes from insurers and presenting them on a single screen to allow comparative shopping.

In Sacramento, California, insurance commissioner Chuck Quackenbush unveils a web site that provides consumers with 'comparison shopping' for automobile insurance. The site provides detailed information concerning insurance premiums and services offered by 28 insurance companies AP

It makes its money by imposing a transaction charge on the company when a customer buys its policy through InsWeb, rather than charging commission on the value of the policy – which is the approach of a traditional broker.

The number of insurance sites offering comparative quotes has mushroomed in the US in the past year or so, and many claim to offer a much greater number of quotes than InsWeb can provide. Mr Ticehurst contends that such sites are not so useful because too many quotes prove confusing. He also says that the quotes such sites offer are mostly indicative, meaning they are based on a general classification of risks rather than actual data.

"We guarantee that the prices you get quoted are accurate and that you will be covered if you fill in the form correctly," he says.

Misys, the UK financial software house, also sees promising opportunities in online insurance. It started its Screentrade comparative quotes web site in 1998 and now offers products from seven UK insurers for motor and travel insurance.

The service is based on the same quotation software that Misys sells to traditional insurance brokers. According to Sarah Moores, Screentrade's marketing manager, the service is growing by 70 per cent a month, although she does not disclose user numbers or the value of business generated.

FT IT Financial services

Here and on the following two pages, FT writers highlight the potential of online insurance

OUTSOURCING by Andrew Bolger

An emphasis on strategic relationships

Insurance companies of all sizes are having to rethink their approach to information technology

The traditional world of insurance is being transformed by deregulation and new entrants using technology such as direct telephone selling and the internet.

In Europe, a wave of trans-border mergers has created a "premier league" of companies that operate on the global stage – such as Axa of France, Allianz of Germany and Aegon, the Netherlands-based group.

The emergence of these giants is polarising the market, threatening mid-sized players who cannot enjoy the same economies of scale and forcing smaller companies to search for profitable niches.

In spite of the industry's staid image, European insurers will spend about $19bn on information technology in 2001 as the final effects of preparations for the year 2000 date changeover and European monetary union are felt, according to Datamonitor, the research organisation and consultancy.

Although insurers' overall IT expenditure is expected to fall from that peak, spending on outsourcing is forecast to grow at a compound annual rate of 16 per cent between 1998 and 2003.

However, there are big differences between countries – reflecting the widely varying pace of deregulation, as well as cultural differences.

Datamonitor says: "UK and Dutch insurers have tended to be more willing to use external suppliers for their technology requirements, while insurers in the southern European countries and Germany have preferred to develop and maintain their IT systems in-house, being reluctant to trust mission-critical processes to third parties."

Steve Racioppo of Andersen Consulting stresses that outsourcing can cover a wide spectrum of activity. "We don't use the word 'outsourcing' – it is a strategic relationship with our partners," he says.

An example is the hybrid approach adopted by Andersen Consulting and Prudential Corporation, the UK's largest life assurance company, after they together analysed a range of IT options from outsourcing to seeking an in-house transformation.

The result was the creation in late 1997 of PruTech, a wholly-owned IT subsidiary of Prudential. Managed in partnership with Andersen, the new business is responsible for designing and implementing IT and related change initiatives. PruTech also provides day-to-day IT services to Prudential Assurance.

All 800 of the Prudential's IT staff have been transferred to PruTech, which has been augmented by about 150 Andersen Consulting staff. Chris Kinder, an Andersen Consulting partner, serves as chief executive.

John Elbourne, chief executive of the Prudential's retail financial services, says: "This unique arrangement places a sharper focus on IT within Prudential and allows us to tap effectively Andersen Consulting's knowledge, skills and ideas as we develop our future IT requirements."

EDS, the big US computer services company, is targetting middle-ranking life assurance companies, partly because high regulatory burdens increase their administration costs.

Paul Bingham, managing director of EDS's UK financial services division, says: "Big players such as Pru and Axa enjoy huge economies of scale. But mid-size organisations find it difficult to move away from legacy systems without significant investment – which is being required at a time of low profitability and falling investment returns."

EDS estimates that it costs most life companies between £15 to £45 a year to service

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CASE STUDY
PRUDENTIAL INSURANCE COMPANY OF AMERICA

How a 12,000-strong sales force builds better links with clients

Mobile systems have enabled insurance agents to more than double the number of life policies sold, with commissions showing a sharp increase

In the age of the internet and the inexorable rise of electronic commerce, one big US insurance group is relying on that most traditional of all sales methods – agents in the field.

But the Prudential Insurance Company of America has given its nationwide sales network a new digital twist. Faced with the prospect of a growing online market in financial services, as in numerous other sectors, it decided not to cut down on its 12,000-strong sales force but to equip it with the latest mobile computer systems.

At a cost of some $100m – part of the group's overall information technology budget of $1bn a year – it has provided its agents with IBM ThinkPad notebook computers and access to a variety of financial solutions over a network. "We've got to make the sales force more productive and effective," says Barbara Koster, Prudential's chief information officer.

"Technology is the only way to do that. Otherwise, you price yourself out of the market. Technology is critical to our future."

Despite reservations expressed by some of the less IT-minded sales agents, she says the new programme – called Prudential LaunchPad – has been accepted positively. "Agents want to know how to use technology to make better sales presentations," says Ms Koster.

To ensure that the agents know how to get the best out of their new technological aids, Boston-based Prudential – the largest US life insurer, which has no connection with the quoted UK life company of the same name – has put them through an intensive training programme. "Training was fundamental to the success of the programme," says Ms Koster. Agents can also call on a 24-hour, seven days a week hotline – involving both IBM and Prudential – if they run into problems.

How does the technology help sell more insurance? Through their portable computers and access to the Prudential's IT system, insurance agents can become more productive through having speedier access to customer and policy data and thus being able to write policies more quickly.

As well as calling up data, analytical material, marketing brochures and other information, agents can also complete policy applications through dial-up connections over the IBM Global Network and access e-mail through Lotus Notes.

Prudential began with a six-month pilot programme, involving nearly 500 agents and managers. Together with other streamlined new business processes, the LaunchPad technology enabled agents to more than double the number of life policies sold, with commissions rising by 153 per cent.

Time-savings

The agents said they could offer customers access to information more quickly and easily. Thus customers could make better informed decisions about their insurance needs. The time taken to process new applications shrank from weeks to days.

Ms Koster says the equipping of agents with the latest technology is aimed at helping them provide better and faster service to customers without losing face-to-face contacts.

"What we've done helps to build relationships with clients. They feel the agents have the information at their fingertips."

While many clients are now internet-savvy enough to do much of their own financial research online, Prudential believes agents in the field remain crucial to the customer relationship. In fact, it is adding a further 2,500 sales representatives this year.

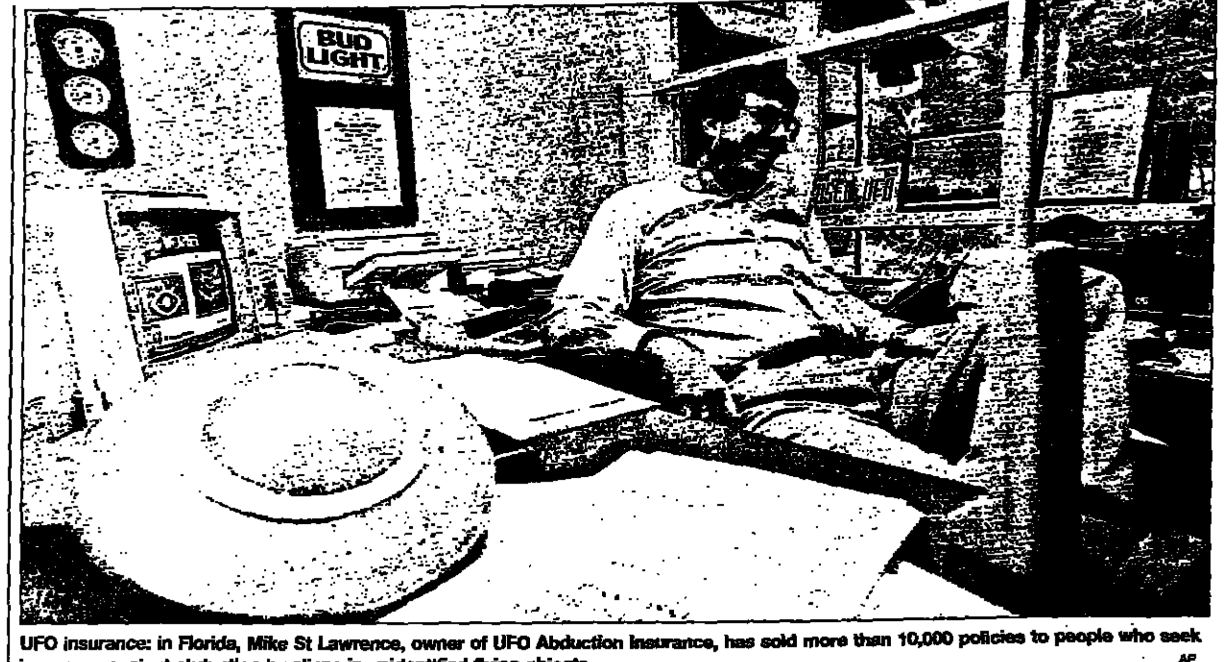
But clients can also access more information online and make some transactions directly over the internet. Since Prudential has found that the proportion of its retired clients using the internet is now 38 per cent, it is keen that its agents should keep up.

In IBM's view, Prudential's example can be emulated by other companies in a variety of sectors. "There's not a company with a sales force that is not looking at how to improve its effectiveness," says Virginia Rometty, general manager of IBM global insurance solutions.

"Many companies do not believe in just the internet or agents, but in a more effective combination of both."

Some customers want to deal only face-to-face, although a new generation is growing up which is wholly familiar with the internet. However, the development of new IT devices – such as palmtops and mobile phones – and of voice recognition will soon enable people to interact with technology in a more natural way – "we don't just think of technology as involving a keyboard".

Andrew Fisher



UFO insurance: in Florida, Mike St Lawrence, owner of UFO Abduction Insurance, has sold more than 10,000 policies to people who seek insurance against abduction by aliens in unidentified flying objects AP

CASE STUDY
CGU

Group makes a big move to network computers

Slimmed-down personal computers will be used at CGU branches throughout the UK

When Commercial Union merged with General Accident last year to form CGU, it acquired one of the most ambitious outsourcing operations in the UK insurance sector. Now, it looks set to extend its outsourcing arrangement across the whole company.

GA handed over its computers to IBM in 1996 in a 10-year contract valued at £330m ($534m). Before then, GA had relied mainly on old software, which it had written itself to suit its own requirements, and heavily customised applications packages. It had decided that these systems could not be maintained cost-effectively and that it should move to packaged software.

It chose an Australian package called Huon, which IBM marketed and supported worldwide, and decided to outsource its entire information technology operation in Perth, Scotland, to IBM. The US computer group was keen to make a success of the deal and turn the Perth site into a centre of excellence for the whole insurance sector, becoming a reference site from which it could expand its customer base.

Outsourcing solved the awkward problem of what would happen to GA systems development staff after the move to packaged software. If they had been made redundant, they would have had a poor chance of finding alternative employment near Perth. Together with the lease of the mainframes, IBM, therefore, took over 276 GA staff and 50 contractors, who joined its team in Perth. IBM became effectively a tenant in its client's premises.

GA retained ownership of its IBM RS/6000 mid-range servers, as well as other servers, terminals, communications and desktop machines. It also kept responsibility for forming information technology strategy and maintained a small in-house team for managing the relationship with IBM and developing ideas for new systems.

The prime objective of the new arrangement was for IBM to take control of software applications and enable the company to migrate from its old bespoke systems to the new Huon package. It is a huge exercise in rationalisation, according to Max Currie, the chief IT manager.

The result should be systems which require a minimum of customisation and are cheaper to maintain than their predecessors, while delivering a range of functions closer to the company's requirements. Once the new systems are bedded down, the future would seem to require insurance products to be fitted to computer systems rather than the other way around.

Advantage

Another outcome should be that new insurance products can be designed and brought to the market more quickly and easily than with the old bespoke systems. This could cut months of work to weeks, according to Mr Currie. IBM has begun installing its network computers – cut-down personal computers designed to receive most of their information from a central server – in one of the largest moves to NCs so far carried out in Europe.

NCs are to be used in the branches around the UK for personal and commercial insurance, replacing dumb mainframe terminals and more expensive personal computers. The NCs will provide access to the Huon applications running at Perth.

IBM said that it opted for NCs because they would be much cheaper and easier to run.

CGU's linked brokers will have the same technology installed later. Overall, the outsourcing arrangement is reckoned to have been a success so far.

IBM has put some of its best insurance systems experts into Perth in a bid to make it a showcase for its skills in that sector.

GA believes that although it may not have saved money directly, it is now spending more on systems which will convey a definite market advantage and less on merely maintaining the status quo. However, it is still very early in the 10-year contract and there is likely to be turbulence ahead.

The merger of GA and CU was intended by the management to save around £225m over the first two years, much of it by unifying computer systems. Analysts were sceptical as to whether such savings could be achieved so quickly, but the plan gave rise to a question about the future of CU's computing strategy.

GA's Perth centre was designated as the head office for the combined general insurance business. CU's in-house development strategy seems to be completely out of favour now.

According to business service director Bill Brant, the whole of the company's general insurance business will be based on Huon. CGU's direct insurance business has already gone over to Huon and by the end of this year most of its personal lines will have followed.

Around 50 integrated branch offices will also move to Huon this year. By the end of next year, most of the commercial lines will also be on Huon.

The former CU mainframe site at Whyteleafe in Croydon, near London, is to be closed as a data centre and its processing power will be transferred to Perth, although the Whyteleafe centre may continue life as a support and systems development site, says Mr Brant.

IBM could soon have a much larger outsourcing contract in terms of its data centre operations and the desktops which it supports. It will certainly have far more NCs to install and operate. But Mr Brant says that some of the contact with users and the helpdesk function are likely to be brought back in-house.

This re-organisation is very likely to cause some tension between IBM and its client. As Richard Griffiths, a consultant with Winchester White, the UK management consultancy, points out, "the difficulty of long-term contracts like this one is that there is bound to be a change in direction of both the partners during its term which is going to be difficult to manage".

George Black

OUTSOURCED SERVICES

Insurers seek cost cuts

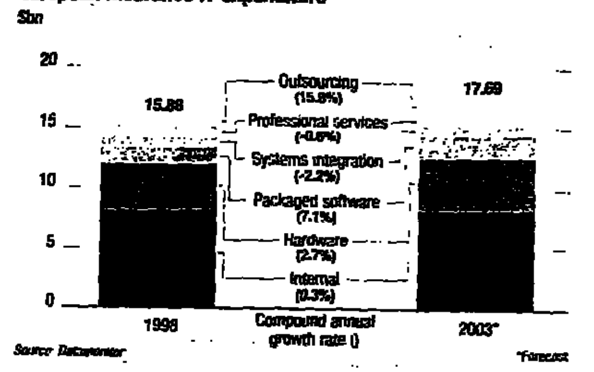
From previous page

each existing customer and from £60 to £70 to acquire a new customer. It guarantees to reduce those costs to about £9 and £40 respectively.

Mr Bingham believes that outsourcing is very much related to business process operations rather than being a technology issue. "It can take some insurers 24 months and £1m to develop a new product. We are looking to provide customers with a system that will allow them to develop a new product in 24 weeks." EDS also believes it can help mid-market players develop "white label" insurance products that can be sold through retailers and affinity groups, a market currently dominated by the big players such as CGU, the UK's biggest composite insurer, and Aegon.

The rapid pace of technological and market change in insurance has led some to speculate about the scope for "virtual" insurers – companies that might only have a brand image and core underwriting and actuarial capacity, outsourcing much of what has traditionally been the industry's business such as clerical work, claims and investment management.

European insurance IT expenditure



Source: Datamonitor *Forecast

Mike Smart, UK sales and marketing director of PMSC, which provides IT services to the insurance industry, says: "The virtual company is of interest not only to new entrants but also to existing players looking to alter their cost structure, trial new products and experiment with new distribution techniques.

"Establishing a virtual company, which transacts business entirely across the internet, has generated immense interest in the US and it is following here in Europe." PMSC points out that in this type of environment, administrative costs are all variables, allowing rapid entry through utilising established technical infrastructures and rapid exit if market conditions warrant a withdrawal.

Mr Smart says: "While not every organisation will embrace the concept of becoming a virtual entity – nor should they – this more lateral approach does provide tremendous scope for changing the structure and costs base of a business.

"Too often, decisions relating to the outsourcing of hardware components, maintenance of technical infrastructure, utilising packages or the creation of a virtual company are clouded by emotive issues."

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CASE STUDY
WORLD INSURANCE NETWORK

Insurers enter the world of electronic commerce

By developing more efficient communications around the world, the industry can create increased value for customers

The commercial insurance industry is in the middle of a unique and tortuous process of convergence that is a direct result of the imperatives of electronic commerce.

In Europe, two organisations, Limnet (London Insurance Market Network) and Brussels-based Rinet (Reinsurance and Insurance Network), have dominated the electronic exchange of information.

But late in 1995, a new body was formed by four of the world's largest insurance brokers, Aon Group, J & H Marsh McLennan, Sedgwick and Willis Corroon. Their vision was that the World Insurance Network (WIN) should provide the preferred electronic marketplace for the industry.

This was an implicit critique of the efforts of Limnet and Rinet to grapple with the rise of electronic commerce. However, in a further development, the three last year announced the creation of a steering committee to consider the formation of a new merged organisation. This is now due to start operating in June. "We are bringing together participants from both sides of the Atlantic and Europe. It is pioneering work with many people and interests sitting around the table," explains John Hosie, WIN's Sales & Marketing Director. The deliberations are thus expected to represent a revolution for commercial insurance as it comes to terms with the new realities of global electronic commerce.

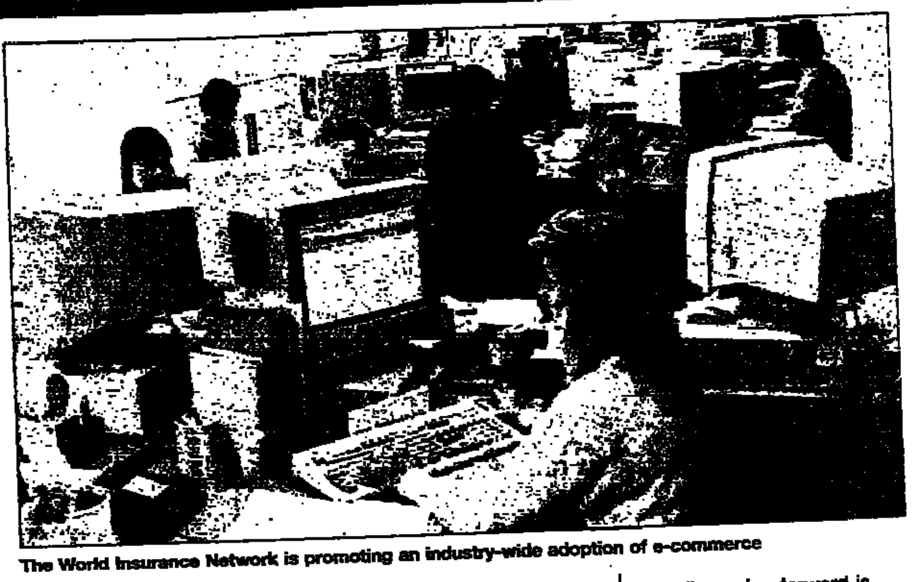
WIN was designed to promote the industry-wide adoption of electronic commerce. Its strategy was focused on a number of directives, including the replacement of paper with electronic documents and information, the reduction of costs and increased client service benefits, and the harnessing of the latest technology, especially that associated with the internet.

These tasks are complex enough on their own. For example, the open internet cannot be trusted to preserve the integrity of the large electronic documents of the type that commercial insurers typically exchange, let alone the details of trades that are worth billions of dollars.

But developing appropriate security to match the characteristics of the industry is important, too. "The right granularity of information depositories is one aspect," says Graham Mansfield, global solutions manager with IBM, a Limnet partner with an interest in the WIN project.

"If, for example, a broker publishes risk information for underwriters, he does not necessarily want them all to see exactly the same details. Similarly, an underwriter wants to have a private relationship with the broker."

However, WIN's goals did not stop there. WIN saw the industry being left behind in the world of electronic communication. "In the banking industry, electronic networks such as SWIFT are the norm," WIN's web site explains. "Only 1 per cent of global insurance transactions are executed over electronic networks."



The World Insurance Network is promoting an industry-wide adoption of e-commerce

In other words, WIN is challenging an entrenched culture to change. The old-boy network is to be usurped by an electronic network that enhances collaboration between trading partners. On one level, this is about encouraging participants to move beyond deals done over a shared bottle of claret at lunch.

But more significantly, it is aimed at revitalising the industry through process transformation. "Lots of organisations are saying things to the industry about the need for global standards," continues Mr Hosie. "We speak from the brokers' perspective, since they are the start of the food chain. Parts of the insurance industry are electronically advanced already, but unless brokers do it technologically as well, moving forward is hindered."

Ultimately, WIN was driven by the strong conviction that electronic commerce is its own best argument, since the efficiencies that it delivers for global inter-company communication actually free the industry to genuinely add value for the future. "We have achieved much but are still really only scraping the surface." Mr Hosie adds wistfully.

WINconnect is the first tangible manifestation of its vision. This is a messaging service similar to an intranet for facilitating the transactions of information between brokers and insurers.

This global connectivity includes a directory that dramatically opens up the number of contacts a participant can draw on. It also includes extra features such as news and information services.

As WIN has been put through its paces, both Limnet and Rinet have also been active. Limnet has launched a new internet-based trading system to replace the market's existing EDI-based system that was judged to be out of date and under-used.

Rinet has introduced RINtrade to make insurance placing faster, easier and more cost-effective.

"We're also looking at security issues," says Margaret Haffenden of Rinet. "How do you make sure that the person offering business electronically is actually who they say they are?" Legal issues are also being studied – "what does national and European law have to say about electronic commerce?"

Mark Vernon

CASE STUDY
EAGLE STAR DIRECT

Taking up a strategic position to meet clients' future needs

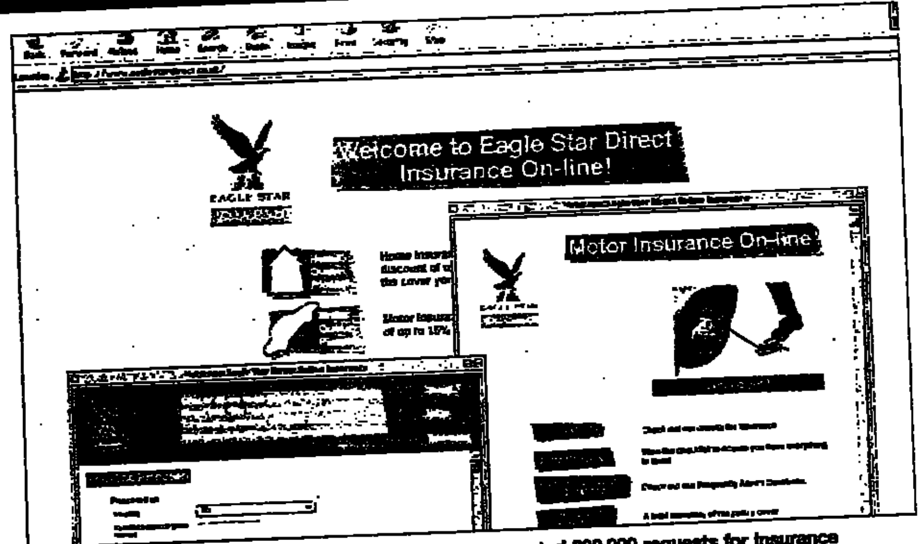
Even though business generated by the web site does not yet justify the investment, valuable lessons are being learnt

Eagle Star Direct did not want to create a web site that only provided information. So it decided to use the internet to sell its products efficiently and in a way the consumer found easy to understand and use. It started with motor insurance in August 1997, with travel following in April 1998 and home insurance in July 1998.

Its philosophy is that the site should be as interactive and user-friendly as possible; a visitor looking for a quote must be able to continue to purchase the policy. It uses JavaScript to produce a dynamic interface that presents relevant options and changes in response to the information supplied.

"I see the internet as a very important development for us and I am delighted with the way that Eagle Star Direct entered the market and the time that it chose," says Ian Owen, managing director of personal direct at Zurich Financial Services, formed from the UK company's merger with Zurich Insurance. The combined company has direct business with 1m customers.

Sales volumes are currently 60 per cent motor, with travel accounting for 25 per cent and home insurance for 15 per cent, although this may reflect a seasonal influence. The site has so far generated 200,000 quotation requests and over £1m in gross written premiums. "This is less than 1 per cent of our total, which is in line with what we expected," says Mr Owen.



Interactive and friendly: Eagle Star Direct's site has generated 200,000 requests for insurance quotations and more than £1m in gross written premiums

"Current sales figures alone do not justify investment in the site, but it represents a strategic investment to position us for the future and the cost has not been huge. For instance, it is a fraction of the amount of money that a typical insurance company would spend each year on systems maintenance on its mainframe administration systems."

Conversion rates through the site are much lower than by telephone, which is not a concern as the cost of providing the internet service is low. Another distortion in the rate occurs because the ability to save quotations allows people to consider more variations before making a final choice.

Part of the investment is learning what internet customers want. But Mr Owen sees the main benefit as positioning, not just for the internet, but also for other emerging new channels such as interactive television. He believes that customers should be able to deal with a direct provider through whatever communications mechanism they choose, whether post, telephone, internet, interactive television or kiosks.

"They are not distinct distribution channels but access methods for the consumer to enter and deal with the organisation," he says. "Our customers must be able to mix and match the mechanism as appropriate and we must offer a seamless service across these different access points."

For example, somebody could purchase a motor policy over the internet, telephone for a pensions policy, look at its value on the internet and post their standard change of address card, if necessary.

Early indications are that the site is attracting good quality customers. Average premiums are higher than through the telephone, claims results look promising and people are renewing. "I am delighted with the way users have responded," says Mr Owen. "The sort of customer we are getting on the internet is the sort of customer we are very pleased to have."

The site will be further expanded to sell Eagle Star Direct's simpler life and pensions products; Zurich Municipal's products will be added later. Facilities will also be added to allow policy-holders to adjust their cover through the site.

"The internet will become increasingly important and we need to be at the right point on the strategic development curve when it expands rapidly to reach critical mass," concludes Mr Owen. "Interactive television in the home will be the next new access mechanism. It will have a slow start, but eventually it, too, will become important."

Rod Newing

Java opens up exciting new horizons in IT

Nearly a million programmers use Sun's new software language which offers big benefits for corporate IT users. But Java's progress is not without fierce controversy, writes **Tom Foremski**

The versatile Java programming language has made significant progress over the past few years, becoming an important technology that helps solve many IT problems and make new types of applications possible.

Developed by Sun Microsystems of the US, Java offers software developers a more efficient computer programming language than they have generally been used to, while its cross-platform capabilities allow developers to create just one version of their software and run it on a range of different computers and operating systems.

"Java, as a programming language, offers many inherent features that are very useful to programmers. It has become a mainstream technology and is being widely used by corporations especially on server systems," says Ron Rappaport, industry analyst at Zona Research, the US market research company.

Zona estimates that there are between 400,000 and as many as one million programmers using Java to develop applications. But while Sun can claim that Java is a success, there are some awkward issues affecting its future.

The key issue is the standards process which is being managed by Sun. Several leading computer companies are unhappy with allowing Sun so much control over a key computer technology.

Usually, the standards process is handled by an independent standards body, a slow process that can take years before a technology becomes an official international standard. To speed things up, Sun has been allowed to serve as the submitter of Java specifications to the international standards organisation.

Microsoft and Hewlett-Packard have been the chief critics of this process. And lately, stalwart Java supporters such as IBM and Oracle have also been voicing their displeasure with Sun's control over the standards process. This is because Java has become an important technology and Sun is increasingly becoming a competitor to its Java supporters, who are uncomfortable with a competitor being allowed to control a strategic technology.

Sun claims this ensures that the Java standards process is fair and open to input from all companies. To placate its critics, Sun has made some changes to its Java license agreement by adopting more of an open source code model in which developers can make changes to the core of a software product, as with the Linux operating system.

But for Hewlett-Packard and Microsoft, these changes do not go far enough. Hewlett-Packard, for example, has launched a separate effort to develop Java technologies for embedded systems, an effort that rivals Sun's work in this area.

Another controversial issue is Sun's attempts to make sure that there are no competing and incompatible versions of Java that would jeopardise its cross-platform capabilities. Companies licensing Java must agree to make sure they do not create versions that are designed to run on a specific computer platform. But some companies have been customising Java to run on their platforms because of the slow performance of cross-platform Java.

Sun has sued Microsoft over this issue, alleging that Microsoft's version of Java is optimised for its Windows platform and will not run on other platforms, thus breaking the terms of the Java license.

The two companies are battling the issue in court, and Sun has so far won a preliminary injunction against Microsoft under which Microsoft must change numerous software packages to ensure the Java they contain is cross-platform compatible.

Scott McNealy, chief executive of Sun Microsystems, holds a bottle of Coca-Cola as an example as he explains his position on licence contracts in the lawsuit against Microsoft over the Java platform AP

"The battle between Sun and Microsoft is a religious war," notes Mr Rappaport. "I think most Java developers don't pay much attention to it. But the dispute does have an effect on Java because Sun and Microsoft have great influence."

The more important issue, says Mr Rappaport, is the standards issue, which Zona has identified as the key obstacle to greater adoption of Java by developers.

Although Microsoft claims its changes to Java have benefited developers because it makes Java applications run faster on Windows-based systems, the company has admitted that it feels threatened by Java's cross-platform capabilities.

This is because a Java application does not need the Microsoft Windows operating system to run, since it will run on a wide variety of platforms. This cross-platform feature of Java is a key reason why some leading IT system suppliers such as Oracle and IBM have been strong supporters of the technology and have added Java capabilities to their key products.

There were reports earlier this year that Microsoft was secretly working on a Java competitor code-named Cool. The goal would be to challenge Java directly with a technology focused on Microsoft's proprietary Windows and other software technologies.

Microsoft denied the reports of a secret Java competitor and said Cool had a different focus, allowing Windows software developers to use new types of software technologies to develop applications. But Microsoft is still exploring ways of bypassing Sun's close control over Java.

As part of its response to Java, Microsoft has just announced plans to unveil "write once-run anywhere" tools for software developers. Bill Gates, the chairman, said he was excited at what its new Developer Group – which is working on the new products – was doing.

Earlier this year, Microsoft asked US district judge Ronald Whyte, presiding in the legal dispute between Microsoft and Sun Microsystems, to clarify his preliminary injunction on Microsoft's Java products. Microsoft asked if the ruling applied to "clean room" versions of Java. This is a term for a product that offers the same features as another product, but has been developed without any direct exposure to the target product.

Judge Whyte said that the injunction only applied to Sun's Java. This ruling could give Microsoft the green light to develop its own version of Java that is free of Sun's licensing restrictions. But there is no indication as yet that Microsoft will attempt this route, which could be fraught with further legal problems.

While Sun battles to stop Java fragmenting into incompatible versions, it continues to push Java into other applications. Sun's Java-based Jini technology offers a way to easily network a wide variety of digital devices. And Sun has developed versions of Java for smart cards and is targeting mobile communications devices.

FT IT Software at Work

Here and on Page 14, FT writers highlight Java applications

JINI TECHNOLOGY by Tom Foremski

Online links made simpler

New software will smooth the task of connecting computers and other electronic devices to networks

Sun Microsystems recently unveiled its Java-based Jini technology, which will allow large numbers of digital electronic devices, not just personal computers, to be easily connected to networks and thus share their resources with other users.

By making use of the cross-platform capabilities of Java, Sun hopes that Jini will become the universal "glue" that will allow various types of electronic devices to connect easily with each other and to other network resources. The concept may sound simple but is very complicated with currently available technologies. Connecting anything to a network involves a network administrator to assign a unique identifying number and set various access privileges, as well as to make sure that the network software can support that device.

Jini has a different approach. It consists of a small amount of software, about 50 kilobytes in size, embedded in the electronic device, which might be a digital camera, a smart phone, or even a hard drive. That software immediately sets up the links to the network and identifies itself and its resources transparently, requiring no intervention by a network administrator.

"Sun's vision of computing is a promising one, because it will allow a great variety of clients to participate on networks without the prior installation of special protocol stacks and local area network-specific software drivers on each client machine," says Jean Bozman, a senior analyst at International Data Corporation, the US market research group.

"Instead, the software drivers can be delivered via Java technology on a just-in-time basis, as needed. Inter-operability will be enhanced, and that inter-operability will be good for end-users both in the office and at home."

Potentially, if Jini were included in all types of PC and non-PC devices connected to the internet, it could unleash futuristic applications that could harness all the spare computing and data storage resources of all systems connected to the Internet. Most PCs, for example, only use a fraction of their computer power most of the time.

Jini would allow other computer users to make use of all that spare computer power to create a global parallel supercomputer that could be used to tackle some of the most complex computer processing problems of our time, applications like global climate modelling that could bring great benefits.

While such a grand vision is still just a fantasy, Jini does have important applications that will make life simpler for corporate IT departments in administering large numbers of network users, and also in integrating new types of hand-held computers and other digital electronic devices.

Jini, however, faces competition from Microsoft with its Universal Plug and Play technology and from Lucent Technologies' Inferno technology. Microsoft's Universal Plug and Play is clearly aimed at Jini and it offers similar features and benefits.

Like Jini, Microsoft is proposing that digital electronics devices contain a chip with about 40 kilobytes of software to handle the network connections. The company will distribute a developer's kit for Universal Plug and Play at a developer conference this month and it is working with key electronics firms such as Intel to help develop the chips to support its technology.

Microsoft also has a secret research project code named Millennium which is working on developing technologies that allow applications to use computer resources distributed across a network. But Millennium is more closely tied to Microsoft's operating systems while Universal Plug and Play does not require the use of Microsoft operating systems.

Lucent Technologies' Inferno technology is yet another potential contender for Jini and Universal Plug

Turn to next page

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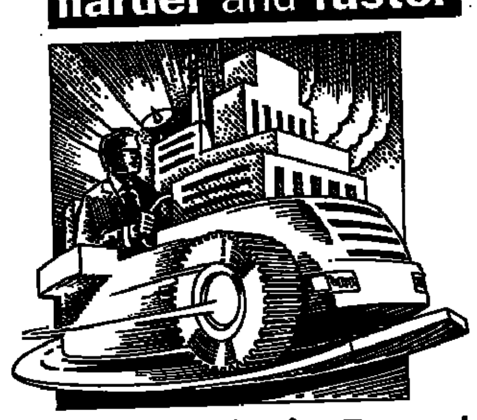

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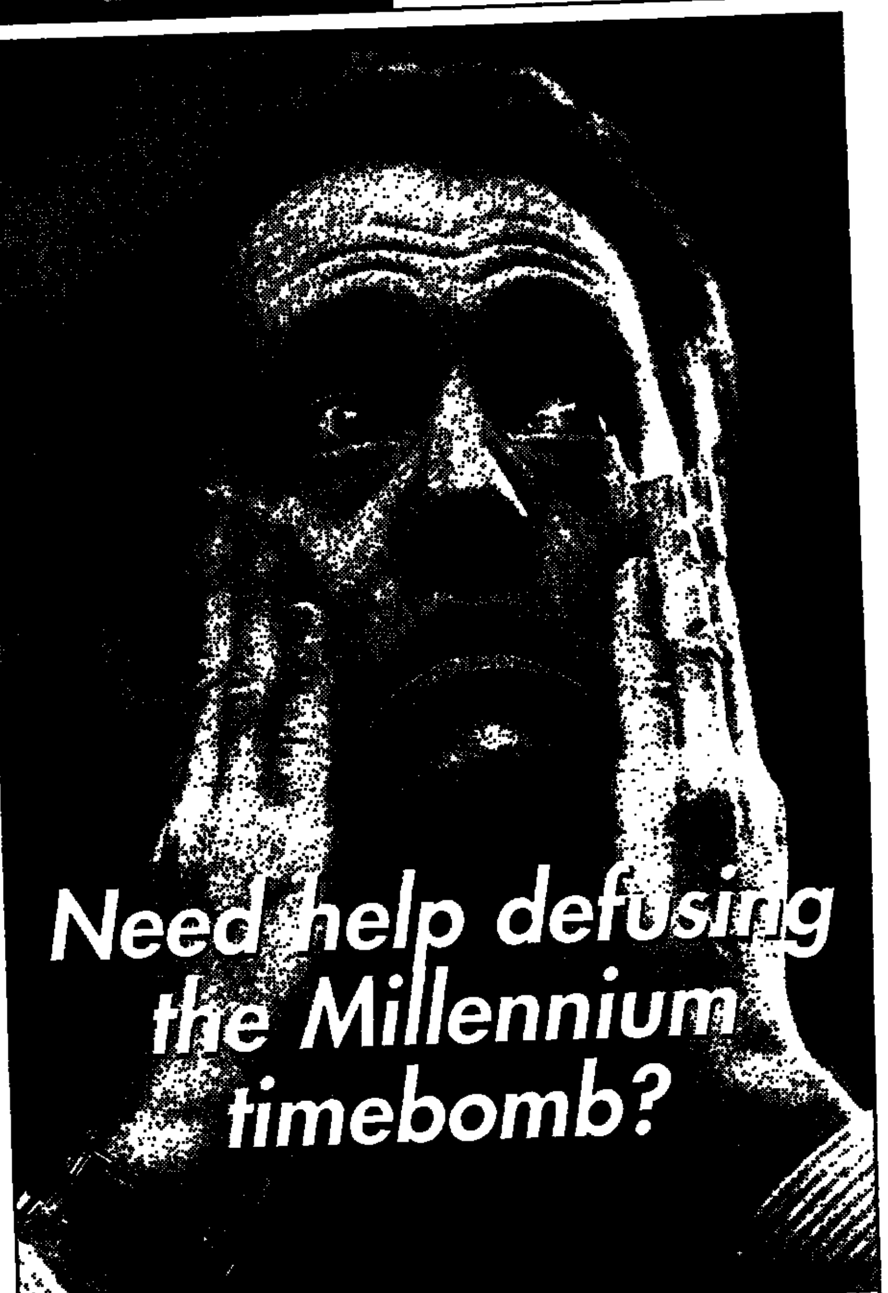

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DEVELOPER'S VIEWPOINT: JOHN GAGE OF SUN MICROSYSTEMS

Setting the networks free

The unhindered flow of digital data is the vision which motivates one of Silicon Valley's leading and most outspoken companies, writes **Michael Dempsey**

John Gage, chief scientist at Sun Microsystems, owns what he describes as "the most expensive house in Berkeley". Coming from any other founding father of the information technology industry, this would be a boast about the wealth that Silicon Valley generates.

In the case of Mr Gage, it is an ironic comment on the fact that he sold off his founder member's stock in Sun "to buy the house before we had our first kid". The shares that bought the family house would be worth millions of dollars today.

One of the 15 people who set Sun on the road to success back in 1982, Mr Gage reckons that today he is worth "what a successful automobile dealer is worth". There is a remarkable disparity with the huge personal wealth of Bill Gates, the founder of Sun's arch-enemy, Microsoft. Yet the wealth gap does not worry Mr Gage; in fact, he welcomes any chance to highlight the distance between the two very different IT empires.

Mr Gage is on a crusade to promote Jini, the latest software trend to emerge from Sun and the fertile mind of his friend and contemporary, Bill Joy. Jini can be seen as son of the Java operating environment, taking the Java idea of easily written specific and practical programs that are claimed to be able to run with any system and opening up the computer network to any device that embodies a microchip.

This is what Sun calls "pervasive computing". It is a logical development of the long-term Sun philosophy that "the computer is the network". Mr Gage enjoys an easy relationship with Mr Joy, who has retreated to a private lab in Aspen, Colorado, where Jini was devised.

"He is really the chief scientist. I'm the chief assistant. I work for Bill Joy. He does it, explains it to me, and I go and explain it to other people. Bill is the god of abstract stuff."

Sharing knowledge

Sending information from one place to another without let or hindrance, particularly without relying on proprietary software from a single dominant supplier, is the big idea that dominates Mr Gage's IT career. He handles a digital camera as he explains Jini.

"We see a world that is evolving billions of intelligent devices; Jini software allows every intelligent device to offer what it does to every other device."

In practical terms, mobile phones and palmtop computers are more immediate candidates for Jini applications than washing machines and microwaves. But with very small amounts of computer code, Jini could open the way for programs to jump from one device to another across a vast network.

Mr Gage cheerfully compares Jini to another very American idea, the singles bar. "Jini is the rendezvous point – it sends a message from a printer to say 'if you want me I'm available'." Behind the technical innovations that drive Sun is a very clear notion that IT should move forward through shared knowledge.

Although it is an industry leader today, Sun emerged out of an intellectual movement in the west coast academic community. Along with Bill Joy and Scott McNealy, Sun's chief executive, Mr Gage regarded existing networks as too inflexible and dominated by commercial concerns.

The Sun name derives from Stanford University Network and the corporate ethos was signalled from the very start by Mr Joy releasing "the complete source code for everything we did". Mr Gage portrays this as an example of Sun's approach to an industry that has historically been reluctant to share data with potential competitors.

"If you give access, you get creativity. If you exhibit possessiveness, you get death." The depth of

John Gage, IT guru: 'We aim to open up ideas and distribute them'

feeling that lies behind the continued warfare between Sun and Microsoft goes back to the roots of these companies. Bill Gates may be younger than the Sun founders, but he attended the same open IT seminars in California.

TCP/IP, the complex but critical Internet protocol language underpinning the web, was spotted for its true potential by Sun, according to Mr Gage. Mr Joy, whom he refers to as "Mr Software", crossed swords with a young Bill Gates on the subject of the internet back in the early 1980s.

"Bill Joy explained this to Bill Gates ten times," he beams, emphasising the dramatic weight of the number 10, "and he still didn't understand it." Mr Gage is relaxed and intellectually generous, but mention of Microsoft always provokes condemnation.

"Microsoft started with a couple of people who didn't know much about computers writing very ugly code." There is such a philosophical divide between Sun and Microsoft that it is tempting to characterise Mr Gage's attitude as academic and charitable. Except that Sun's huge commercial success undermines this label.

"Our idea is to open up ideas and distribute them, so people whose names we don't know can come up with their innovations. That may sound charitable, but what's odd about that? If there's an area where you excel, you will always be a success."

Making its reputation as a provider of powerful hardware, Sun never lost sight of the fact that networking generated the demand for its computer workstations and servers. And unusually for a west coast IT guru, Mr Gage places his success in the context of developments that came out of Europe.

British code-breaking activities in World War Two led directly to work on computers at Manchester University in the 1950s. "The idea of Jini was thought about in Manchester nearly half a century ago."

Mr Gage pays tribute to Alan Turing, the computer pioneer. "Jini is a continuation of the Turing dream of allowing intelligence in any device."

Mr Gage, now 56, has watched an entire industry evolve from nothing. He clearly dislikes the way products are launched today "with three engineers and four lawyers". But his intellectual interest is still engaged. And he has no plans to retire and take a back seat. "It's all too fascinating to abandon, the conversation is too rich."

CASE STUDY
GERMAN TAX SYSTEM

Streamlined approach to revenue collection

Germany's byzantine tax system continues to resist radical reform. But the IT systems that run its tax collection are at least being overhauled, thanks to a bold decision to standardise software development using the Java programming language.

Tax collection in Germany is decentralised among the 16 Länder (regional states) which have traditionally made their own choices on hardware and software. As well as mainframe systems from IBM and Siemens, the Länder were using a number of different PC and Unix operating systems and old-fashioned "dumb" terminals. To complicate matters further, the networks in use differed from state to state.

In 1994, the tax authorities decided that the systems needed modernising and harmonising because of the increasing problem in maintaining these "legacy" systems, some of which were running programs over 20 years old.

The variety of hardware in use made it politically contentious to standardise on a single supplier and given the size of the system – 120,000 users in 700 offices across Germany – the cost of doing so would have been prohibitive.

The tax authorities thus needed a solution that would let them easily develop software for a range of different computers, allowing the Länder to keep their existing hardware, if so desired.

Holy Grail

The ability to write a program once and run it on different computers has long been the Holy Grail of software developers, but it has often been impractical to achieve. Object-oriented technology came to prominence in the early 1990s because its enthusiasts claimed it could deliver this highly desirable "platform independence". Object technology promises quicker software development and lower costs, but early object-oriented languages, such as C++, proved difficult for programmers to use.

IBM initially chose C++ for its San Francisco project, which is an ambitious attempt to simplify the development of complex real-world applications using a set of common "business objects" that can be assembled to make larger, more sophisticated software.

When Sun Microsystems' Java programming language arrived on the scene in 1995, IBM was quick to drop C++ in favour of the new language for its San Francisco project, because Java was much easier to use.

Simplicity

Sun originally developed Java to simplify the programming of set-top boxes. This simplicity and the fact that Java programs work on different types of computer quickly struck a chord with developers of more conventional software.

Since the initial release of the first San Francisco application business components in 1997, over 800 software development organisations have licensed these components from IBM and used them to develop their own business-specific applications.

When the German tax authorities invited bids for their IT systems modernisation, they were keen to use object-oriented technology because it seemed the best way to achieve the desired system openness and flexibility, according to Wolfram Rockstroh, the manager responsible for coordinating the tax automation project at the German finance ministry.

At the time of the tender, however, Java was an exotic and untried technology, more typically used for animating web sites than building mainstream business applications. Nevertheless, in early 1997, the tax authorities took the plunge and awarded the modernisation contract – called Fiscus (federal integrated standardised computer-based tax system) – to a consortium of vendors that would use Java within the San Francisco "framework" defined by IBM.

"We were quite surprised at the decision, particularly as we then had no reference customers for San Francisco," admits Julius Peter, an IBM manager who heads the San Francisco project in Europe. "On the one hand, we obviously hoped they would award us the contract, but on the other we knew it would be a critical project for us and one on the borders of

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JINI

Support from big companies

From page 12:

and Play. Lucent recently introduced InfernoSpaces, a platform-independent technology that, unlike Jini, does not require support for Java or a Java virtual machine. Devices using InfernoSpaces can be easily connected to networks and share their resources with other network resources.

"Inferno's vision is to become the distributed operating system solution for the net-centric era," says Mike Skarzynski, who is president of Inferno, the Lucent subsidiary.

"By offering InfernoSpaces to as many software developers as possible, we hope to bring this successful Bell Labs innovation to the attention of device and equipment manufacturers."

InfernoSpaces is currently being used in Lucent's telecommunications systems. But the company says it can be used in a wide variety of applications such as electronic toys, network equipment and high-end computer systems.

While Jini is the most visible of the technologies that seek to solve the problem of easily connecting all types of digital electronics devices to a network, industry analysts say that there is more to be done in fleshing out these technologies.

"Sun has said a great deal about Jini but it is not yet clear how it will be implemented and what needs to be done in building Jini-enabled devices," says Greg Blatnik, vice president of Zona Research, the US market research company. The same is true for Microsoft Universal Plug and Play and Inferno.

"It could take several years before these technologies become a reality," he adds. Jini has received widespread support from key companies, with an impressive list that includes America Online, Bosch-Siemens, Bull, Canon, Cisco, Computer Associates, Kodak, Metroworks, Motorola, Novell, Nokia, Oki Electric, Philips, Seagate, Sharp, Sony, Toshiba and Xerox.

Seagate, for example, a leading manufacturer of hard drives, sees Jini as key to developing what it calls intelligent storage devices. "These next generation storage products are able to efficiently manage data, distribute information, and automate tasks," says Valerie Negler, Seagate's vice president of new business development.

"Sun's Jini technology complements the evolving capabilities of disk and tape drives by providing a path for these intelligent storage devices to work and communicate with other appliances throughout the home, office and around the world."

But Microsoft's Universal Plug and Play efforts could potentially harm Jini adoption. "Microsoft has been actively marketing the concept of Universal Plug and Play to the same set of consumer electronics vendors currently studying the adoption of Jini," says IDC's Ms Bozman. "This Microsoft effort could slow Jini adoption if it creates enough distraction or confusion among OEM hardware providers."

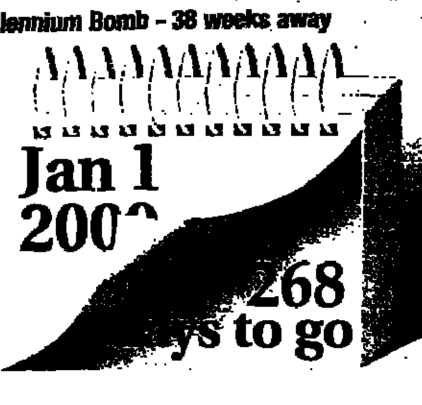
A battle over which technology will dominate is never good for the setting of standards and will delay the adoption of Jini or any other similar solution.

YEAR 2000 by Nuala Moran

Unexpected benefits flow from Y2K problem

IT systems have been refreshed, updated and rationalised as a result of companies having to ensure that they can cope effectively with the millennium date change

The Millennium Bomb – 38 weeks away



The investment needed to defuse the so-called millennium "bomb" to make computer systems year 2000-compliant looked like a classic "grudge buy". While spending the money would not improve the systems, *not* spending it at all could mean going out of business.

There have been plenty of complaints about the negative effects of year 2000 projects in terms of the costs, the disruption, and the way in which it has diverted attention and resources from other IT projects.

But the evidence is that companies are reaping unexpected benefits from fixing the so-called Y2K problem. In many cases, this is because companies have used the year 2000 deadline as a prompt to replace legacy systems. But even for organisations which decided *keep the systems and fix the* code, it has provided the opportunity for a big housekeeping exercise.

As they started year 2000 *projects, many companies* did not even know what systems they had, let alone if they were compliant.

They have been forced to draw up inventories, assess the significance of each system for the continuation and profitability of the business, properly document bespoke systems, put in place disciplines and routines to ensure that once systems are bug-free they remain so, and examine computerised links with external business partners. In effect, IT infrastructures have been refreshed, updated and rationalised.

Better shape

Norman Tooley, year 2000 programme director at United Utilities, the big UK electricity group, believes that the complete spring-clean prompted by year 2000 means that the company's systems are now in much better shape.

"There is no doubt that it has refreshed the asset base, *and made us realise that* some assets were not as efficient as they should be," he says.

Previously, IT *departments would work on one* system at a time, but the year 2000 project required them to deal with all systems simultaneously. Systems had to be ranked according to their importance to the business, so that *a list could* be drawn up of which to fix first. This process enabled companies to identify duplications and retire systems they did not need.

Fons Kuijpers of PA Con*sulting Group says that* some clients have retired as many as 70 systems. "They have cut out duplication, or found a better way of doing something, or decided the function was not really necessary anyway."

The benefits have not been limited to the systems per se. The need to bring the date bug problem to the attention of the board has put *the business focus* on information technology. As Colleen Kaiser, IT research analyst at BancBoston Robertson Stephens, com*ments: "Everyone, including* your grandmother, knows about the year 2000 problem. Every chief executive who has previously ignored the *IT function, has had to* understand something of the technology and its role in keeping the business running, because of the Y2K implications."

Working relationships between IT departments and end users have also improved because the widespread and *pressing nature* of the problem has forced the two to communicate and co-operate.

PA Consulting has carried *out a survey of 200 compa*nies with turnover over £150m ($245m) to assess the impact of resolving the millennium date changeover *problem. Seventy per cent of* respondents said that the business and IT communities had been brought closer together by the problem, *while 80 per cent said it had* made business units realise how dependent they were on IT. Encouragingly, most respondents believe this effect will outlast the end of year 2000 projects.

"The year 2000 problem has made organisations work in a more holistic way, *sharing strategy and process* of how they test systems and recognising they need to manage large-scale projects in a more structured way."

The PA survey also found that although it was a cut and dried project with a defined end point, the year 2000 challenge has had a *major impact on future IT* strategy.

Eighty per cent said it had led to a reassessment of priorities and a rescheduling of *projects*, based on business needs. It seemed inevitable that the hangover from the year 2000 would be a backlog of other IT projects.

In fact, over 50 per cent of *respondents said they had* still been able to proceed with critical projects, demonstrating that effective prioritisation has allowed strategic projects to proceed.

Balking at the prospect of *spending money on creaking* legacy systems, many organisations have used the approach of the millennium to buy new ones. "So long as *existing systems were still* meeting basic user requirements, they were still used," says Mr Kuijpers.

"Even though the systems were not cost-effective, they were never a high enough priority to receive investment." Around 76 per cent of respondents to the PA sur*vey said they had purchased* new systems rather than fix old ones.

But not every sector has used the year 2000 prompt to *improve IT systems and* infrastructures. "Largely, the opportunity has been missed in the insurance industry," says David Grey of Winchester White, the consultancy which specialises in the sector.

"In our industry, the time scales have prevented the *investment in year 2000* being leveraged to improve IT performance. There has been some clearing out of legacy systems but in the main, companies have done *the minimum to get by.* Even so, the cost has been huge."

The problem, particularly in the life and pensions business, lies not in installing new systems but in *migrating data from the old ones.*

"The history of systems development in the insurance industry is that they can get new systems in to support new products, but they can't decommission the *old ones," says Mr Grey.*

As a result, there are multiple systems which duplicate support functions. "There has been too little use of the year 2000 excuse to clear these out."

According to the PA survey, there will be two types of organisation moving into the next millennium. The first group will have used compliance projects to update their IT systems and infrastructure and will thus be well positioned for the challenges of European monetary union, ever increasing merger and acquisition activity and the development of electronic commerce.

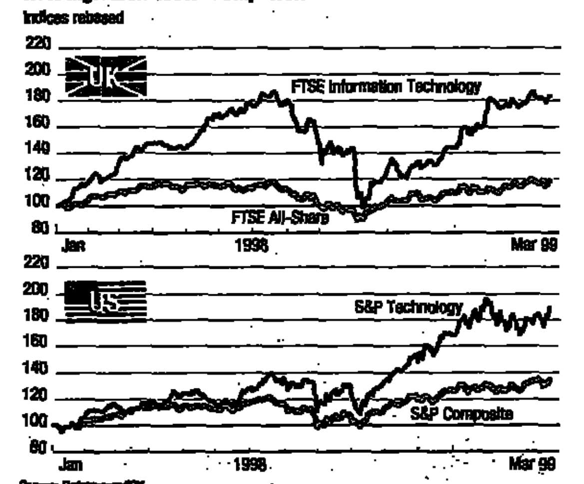
The second group will have used a *one-off* "fix it" approach, and will be at a disadvantage in facing up to the competitive pressures beyond the millennium.

New wave of e-commerce activity

Report by Geoffrey Nairn

How high tech sectors outperform

Indices rebased



Source: Datastream/ICV

Large established IT *companies have been* surprisingly slow to exploit the wave of interest in internet technologies, but there are signs that the giants are finally starting to stir.

Hewlett-Packard, one of the oldest Silicon Valley companies, is keen to show that it is not just start-ups that have good internet ideas. Last week, it unveiled an

IT NEWS UPDATE

e-commerce hosting service, called Emporium, aimed at companies taking their first steps in the fast-evolving online sector.

For a fixed price of £90,000 ($148,000), HP will run a series of workshops for customers and build and host their e-commerce web sites on a secure server for a period of six months. The fixed cost and time-frame allows the companies to decide whether the benefits have met expectations and to adjust their e-commerce strategy accordingly.

"There are too many customers who have approached e-commerce just from a technology position," says Ted Brooks, HP's *e-commerce business* development manager.

Oracle, another veteran of the "traditional" IT industry has chosen the acquisition *route to jump-start its internet* ambitions. Last month, it agreed to buy E-Travel, a net-based corporate travel management service, for $35m. Oracle will combine the E-Travel technology with its software products to create a system that allows corporate users to plan and book business travel using a standard web browser.

"Together, we will be first to offer an integrated solution that helps companies streamline and manage their travel management operations, as well as dramatically reduce one of their major expense areas," says Ron Wohl, senior vice president in Oracle's applications division.

Oracle's 20,000 employees in north America will be among the first to use the system and the company hopes to make "substantial" savings on their travel costs.

Novell, a former star of the PC networking industry, has struggled more than most to adapt to the internet age. The company last month unveiled its new e-commerce strategy. Details of the range of products, called i-Chain, will not be released until later this year, but the software is aimed at allowing companies *to build web sites with more* sophisticated customer tracking and transaction handling capabilities.

C A adds a new conquest

Computer Associates plans to acquire rival US software company Platinum Technology for $3.5bn in cash. CA is the fourth largest software company behind IBM, Microsoft and Oracle, with 1998 revenues of $4.7bn.

While it lacks the visibility of *these larger companies*, CA has grown rapidly in recent years through a stream of acquisitions of smaller software houses specialising in enterprise management software and tools, which represent CA's traditional market.

Platinum, less than a quarter of the size of CA, has pursued a similar growth strategy and so analysts believe the merger has a clear logic, as there is little product overlap. The challenge for the enlarged CA will be to find new sources of growth beyond acquisitions.

Critics often accuse CA of *living off the products and* customer base it acquires with each new acquisition, but it is starting to develop innovative products of its own, most *noticeably the Jasmine object* database. CA and Platinum are also both working on new 3D visualisation technologies for business applications. CA is paying a premium of nearly 300 per cent over Platinum's share price prior to the bid.

Licensing deals for IBM

IBM once jealously guarded its proprietary technologies but has now struck two bold licensing deals with its competitors. The largest is a $16bn, *seven-year contract* with Dell which will allow the PC maker to have access to a broad range of IBM-developed microelectronics, networking and computer display technologies.

Most surprising is Big Blue's $3bn, five-year *deal* with rival EMC covering storage systems. IBM has long claimed to hold the technology high ground in *disk drive technology although* EMC is market leader in high-end storage systems.

Analysts say IBM has finally woken up to the *revenue-generating potential* of its huge in-house component operations. By now supplying external customers, IBM can spread the high research and development costs associated with microprocessors and other advanced components over a larger market than its own product development programmes can support.

Cheap PCs show fastest growth

Personal computers costing less than $600 are the fastest growing segment of the PC market in the US, according to the market research company PC Data. This segment now represents almost 20 per cent of PCs sold while the largest segment, with a 42 per cent share, consists of PCs costing over $600 but less than $1,000. The average retail price for a PC fell to $947 in February 1999, making a 17 per cent decline over the year.

Europeans on US spending spree

Siemens of Germany last month bought three US start-ups specialising in data networking equipment and took a stake in a fourth at a total cost approaching $1bn.

Meanwhile, France's Alcatel spent $2bn for Xylan, the US data networking specialist, as well as $350m to acquire another start-up. Alcatel and Siemens are the latest in a growing band of traditional telecoms equipment vendors to hit the acquisition trail in an attempt to rapidly build their skills in data technologies to handle booming internet traffic.

US networker expands

Ciena, the specialist US networking equipment company, has acquired two smaller privately held networking companies, Lightera Networks and Omnia Communications, for a total of almost $1bn.

Ciena was once cast as a certain takeover target, as big equipment vendors particularly covet its wavelength division multiplexing (WDM) technology, used to increase the capacity of fibre optic links.

HP cuts old ties

Hewlett-Packard plans to spin off its test and measurement equipment activities in what could be the largest initial public offering (IPO) in Silicon Valley's history.

The split will create a new company with sales of over $7bn and will ultimately sever *HP's links with its founders'* original business.

The "new" Hewlett-Packard will be focused on computers and printers.

Another proposed big spin-off, involving the semiconductor division of Siemens, was finally given a name last month: Infineon Technologies. The new company will have a separate stock market listing early next year.

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Tax authorities choose flexible Java system

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possibility." The tax authorities were aware of the risk involved and so insisted that the winning consortium build *a prototype system before* confirming the contract. The prototype project involved modelling one specific tax application from top to bottom *and rewriting* it using Java business objects according to the San Francisco framework.

The prototype took six months to complete, during which *time* IBM *could not* be sure that the tax authorities would not change their mind and opt for a safer, more traditional system *development approach* espoused by one of the competitors for the contract.

"During the six months, we knew we were quite vulnerable to competitors and with 16 different Länder *involved, you never know* what might happen," says Mr Peter.

Nevertheless, the prototype was successfully delivered in late 1997 and the Fiscus project has since become one *of Europe's largest* object-based IT projects and IBM's biggest reference customer in Europe for its San Francisco technology.

One of the decisive factors in the tax authorities' choice of Java was that it allowed changes to be made rapidly and simply by reprogramming the objects rather than by rewriting the whole system.

"Due to the high number of *procedural and legal changes* that continuously occur in tax administration, this high degree of flexibility is mandatory," says Mr Rockstroh.

The first application developed using San Francisco components is for handling fines and should *start operating later this year,* according to Mr Peter. The development of the tax-specific applications has been split between different *Länder. For example,* Baden-Württemberg is handling the module relating to taxes on land purchases, while Rhineland-Palatinate works on the "person data" module.

Altogether, around 30 teams in the federal states are working on Fiscus and the whole system, comprising 50 applications and several *thousand objects, will not be* completed until 2005.

"It's a really major project involving more than 1,000 man-years of development effort," says Mr Peter. Once Fiscus is fully implemented, *the tax authorities hope the IT* costs of running Germany's tax system will drop significantly and taxes can be collected more quickly and with higher reliability. There are also plans to expand Fiscus with new functions such as the ability for taxpayers to file their tax declarations online.

Geoffrey Nairn

FT-IT REVIEW: NEXT MONTH'S MAIN THEME

Focus on IT strategies for medium-sized enterprises

Next month's FT-IT Review on Wednesday, May 5, will look at key issues in selecting an IT stratgy for the medium-sized business.

□ A second theme for the *May issue will be business* telecommunications and the increasing convergence between information and communication technologies *(ICT).*

□ Venture capital in the IT industry will be the topic for our regular feature on IT in finance.

□ The *main* themes for the June 2 issue of the FT-IT Review will be: Windows – what's at stake?; IT in manufacturing, with an emphasis *on computer-aided* design; and IT in finance, with a focus on investment banking. Plus all our regular features, such as interviews with leading *suppliers* and users of IT. □ The main theme for the July 7 issue will be electronic commerce and the wired business.

Business Solutions Series

The next issue in the new series on Business Solutions will focus on Knowledge Management, and will *appear on Wednesday, April* 28. (The special issue on Electronic Business appeared on March 24).

□ Enterprise Resource Planning: May 25.

□ Managed Services and *IT Outsourcing: June 23.*

□ A separate 12-part weekly tabloid series, called 'Mastering Information Management', edited by Tim Dickson, is also appearing with the FT. Issue number eleven on April 12 will look at *gurus in the information* age. For back copies, call: +44 (0) 181 688 6323.

FT IT

Themes for the coming months

FTIT on the web

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For more information

□ *Editorial synopses: for* more details of the next two issues of the Review, (excluding the series on Mastering Information Management), *please use the fax-u-back service* on: 08705 209 903. (Callers outside the UK dial exit code: +44 8705 209 903).

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VIEW FROM THE TOP: NAOYUKI AKIKUSA

Fujitsu becomes more focused

While other Japanese conglomerates predict big losses this year, profitable Fujitsu is transforming itself from a company dependent on hardware production to one whose main source of growth is software and services, reports **Paul Abrahams**

Four out of Japan's five electrical conglomerates appear to be floundering under the weight of collapsing domestic demand and repeated poundings from silicon chip prices. The exception is Fujitsu.

The contrast is stark. Hitachi expects to post net losses this year of Y375bn ($3.2bn); NEC is predicting a Y150bn deficit; Mitsubishi Electric has warned it will lose Y80bn, while Toshiba says it will only break even. But Naoyuki Akikusa, Fujitsu's recently-appointed president, insists his company will report a profit of Y20bn. He also says the group is on track to achieve a 10 per cent return on equity by 2000.

Many market analysts believe Mr Akikusa may be over-optimistic, but all are quick to point out the differences between Fujitsu and the other big conglomerates. Not least, Fujitsu appears to be freeing itself from the tyranny of the silicon price cycle, transforming itself from a company dependent on hardware manufacturing to one whose main source of growth and profits is software and services.

In the year ending March 1998, software and services accounted for 28 per cent of revenues, compared with 39 per cent from computer hardware. The company's emphasis on software and services was underlined by the appointment of Mr Akikusa, who had been head of that division.

True, Fujitsu was never entirely like the other big groups, whose operations variously include nuclear power plants, televisions, air conditioners, elevators and D-Rams. Its heritage as a telecoms provider has helped prevent it from diversifying as much as its competitors. But the recent greater emphasis on services and software has also allowed the group to outperform its rivals.

Over the past two years, its shares have outperformed Mitsubishi Electric by more than 200 per cent, Hitachi by more than 160 per cent, NEC by over 155 per cent and even high-flying Toshiba by 15 per cent.

In spite of its move away from hardware, however, Fujitsu is still suffering. Mr Akikusa emphasises that the hard disk drive business is doing well, mainframes and software and services are still profitable, and the PC business is not posting a big loss. But the question is whether these can cover the losses elsewhere.

The group has been hit by a collapse in domestic demand for telecommunications equipment, following the end of a digitisation programme by NTT, Japan's dominant service provider. That would be bad enough, but the group – along with the other electrical conglomerates – is also suffering from the collapse in D-Ram memory chip prices.

"The D-Ram problem is so big that it is difficult to be optimistic. We are in difficulties. The weight of the memory operations is so great," says Mr Akikusa.

In February, the company revealed that its semi-conductor operations would make operating losses of Y90bn.

Fujitsu has responded to the crisis by demonstrating an unusual grittiness for a Japanese company. "We won't stay in the business of making D-Rams for PCs. We are exiting," explains Mr Akikusa.

The group has reacted by closing its loss-making operations at Durham, in the north-east of England. And it will continue to design chips, but outsource manufacturing. It has already set up such a deal with Taiwanese makers.

New products

The group also plans to reinforce its diversification away from commodity chips. "We have to come up with new products by 2001 that will cover the fall in D-Ram sales," explains Mr Akikusa.

To fund these developments, the group is increasingly resorting to joint ventures and collaborations. For example, it is working with Toshiba on 1-gigabyte technology, with Sony on system LSI (system-on-a-chip) and AMD of the US for flash memory.

Memory chips in the year to March 31 will account for just 32 per cent of output compared with 37 per cent in the year to March 1998. The proportion of logic chips will jump from 44 per cent to 52 per cent.

There is little doubt that Fujitsu is becoming more focused, concentrating on its core strengths. Mr Akikusa, sitting in his white shirt and dark grey suit, appears stiff and formal when interviewed.

It is only when he begins to explain this need for focus, to avoid investing in every possible development that he becomes animated. A politics and economics graduate from Waseda University, Mr Akikusa is not in awe of engineers

"Generally speaking, engineers want to do everything. It may be a good slogan that by doing everything you improve mankind, but by doing that you spend a lot of money. We have to educate the engineers to focus on a few things," says Mr Akikusa.

He is putting this philosophy into practice. Mr Akikusa explains that the group's engineers wanted to expand investment in thin-film transistor liquid crystal display technology, so Fujitsu could make 18-inch screens and even monochrome products. "But we only had a global market share of between 2 per cent and 3 per cent. I told them to keep concentrating on 15-inch products for internal use. If they couldn't concentrate on just that, I said I would sell the business."

He chuckles as he adds: "Sometimes it's good not to have a background in technology."

Not that Mr Akikusa is a technophobe. He accesses his own e-mail at the office, while at home, he and his daughters use the 'net so much that he describes his wife as "an internet widow". He is trying to ensure that Fujitsu's employees are equally enthusiastic. For example, all graduates wanting to apply to the company have to do so by hitting the web site. He claims he would know how to do this himself.

Optimistic: Naoyuki Akikusa, Fujitsu's recently-appointed president

Mr Akikusa is trying to move the company away from being technology-driven to being customer-oriented. "We do not want to sell boxes," he explains. "We want to add value by providing our customers with solutions.

"Our customers have a huge number of software and hardware productsto choose from – too many for them to be able to make the right decisions," he says. "We want to help them make those choices.

"The aim is for Fujitsu to create a relationship like that of a Japanese main bank, but in information technology. Our customers should naturally turn to us."

Domestically, the group is strong in domestic government projects. But the group also has global ambitions. "We have a strong customer base in Japan, but only 1 per cent market share in north America," says Mr Akikusa. "The software and services environment is changing quickly.

"To survive, these companies may need to make acquisitions. This is not a period when our subsidiaries abroad can ask Fujitsu for funds. They must obtain their own."

Mr Akikusa says he remains committed to an initial public offering in ICL, its UK computer services subsidiary. This is scheduled for next year. The US operations could also follow the same path, he adds. Fujitsu's US operations include Amdahl, DMR and Fujitsu Network Communications, its $1bn telecoms equipment group.

Managing such international operations is far from easy, he admits. Software and services have to be local and it is important to encourage this, he explains.

But while maintaining localisation, there has to be some standardisation. He points out the group has already made substantial savings by developing software for the whole company. However, Fujitsu is quick to add that there is no question of selling a majority stake in any of the subsidiaries.

There are, however, limits to the transformation being wrought by Mr Akikusa. Although the group's European operations are doing well, analysts question the company's long-term competitive advantage in the industry.

Mr Akikusa says that at some point the company may concentrate on laptops rather than desktops, but is otherwise non-committal. The cellular phone operations are also clearly a problem. Sales in the year to March 31 were well below previous levels and also way down on the company's forecasts.

Nevertheless, while the other conglomerates seem incapable of generating consolidated profits at the moment, Fujitsu looks set to reap the rewards of its transformation. Although Mr Akikusa insists this has been a long-term trend, his dynamism is at least in part the cause of Fujitsu's relatively comfortable position.

NEWS UPDATE

Lycos sought by bidders

Internet search engines are hot properties, one of the hottest being Lycos – at least to judge by the bidding war that has broken out. CMGI, a US venture fund and the largest investor in Lycos, was last month looking for a company to better the bid of $6bn by USA Networks. CMGI claimed the bid was too low relative to the heady valuations of net stocks.

Spanish web company plans listing

QuePasa.com, a Spanish-language search engine and web site, has filed to sell $40m of shares through an initial public offering, showing that IPO fever is also spreading to the non-English speaking internet market.

The US-based site hopes to become the first port of call for the estimated 400m people around the world – including 30m in the US – who would be happier surfing in Spanish. Spain's leading search engine Olé also has eyes on this market and announced it may list on Nasdaq, the US exchange.

Intel settlement

Intel, the dominant US semiconductor company, reached a settlement with the Federal Trade Commission over its antitrust dispute – brought several years ago – that alleged the chip giant withheld information from competitors that refused to licence their patents to Intel.

Meanwhile, settlement talks to resolve the antitrust case brought against Microsoft by the US Justice Department and 19 states broke up without resolution. The case returns to court on May 10.

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